

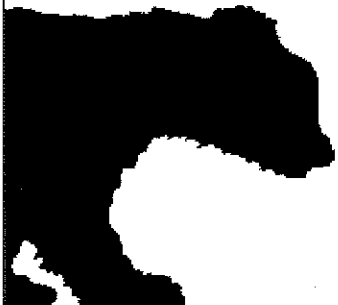
**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1654

In the Matter of)
)
NORTHWEST NATURAL GAS)
COMPANY, dba NW Natural)
)
Investigation of Interstate Storage and)
Optimization Sharing)
_____)

**RESPONSE TESTIMONY
OF THE
CITIZENS' UTILITY BOARD OF OREGON**

August 19, 2013



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1 My name is Bob Jenks, and my qualifications are listed in CUB Exhibit 101. My
2 name is Jaime McGovern, and my qualifications are listed in CUB Exhibit 101.

3 **I. Introduction.**

4 The issues discussed in this docket center around Northwest Natural's use of the
5 shared resources of the retail natural gas distribution system. In particular this docket
6 examines (1) how the revenues from NW Natural's use of the shared resources are then
7 shared between ratepayers and the Company, and (2) how any and all revenues are
8 reported within the Results of Operations. Interstate storage, for example, would not
9 concern CUB if it was conducted in a manner that was fully separate from the regulated
10 retail system. However, when ratepayer-financed assets are used for activities which
11 benefit shareholders, great care must be exercised to ensure that ratepayers are not

1 improperly subsidizing those activities and that ratepayers are being fairly compensated
2 for the use of their assets.

3 The current method of resource sharing has been in place for several years and
4 was proposed during the infancy of the Interstate Storage and Optimization program -
5 before there was much experience with NW Natural's use of these shared resources and,
6 without a lot of analysis of the costs and benefits of the program. Now that NW Natural
7 has been conducting its Interstate Storage and Optimization program activities for a
8 number of years, this docket provides the perfect opportunity to review and analyze the
9 activities in which NW Natural has been engaging and to determine whether ratepayers
10 are being fairly compensated for NW Natural's use of ratepayer financed assets.

11 Both CUB and Staff raised concerns about the operation of the Interstate Storage
12 and Optimization program in last year's UG 221 rate case.¹ Both parties proposed a
13 modification of the sharing percentages.² In that case, the parties agreed to separate out
14 this issue and to discuss it in this proceeding where there would be more time to
15 understand the intricacies, costs and benefits of the programs involved.³ CUB
16 appreciates the Commission's willingness to focus on what has become an issue of
17 concern for CUB, and is interested in an honest exploration of the activities.

18 While interstate storage and optimization are often linked, CUB recognizes that
19 they are separate services and will, therefore, examine them separately. For that reason,
20 CUB will address three issues in this docket, with the majority of the discussion focused
21 on the issue of optimization. Our testimony is organized as follows:

¹ UG 221/ Staff/1000/Zimmerman; UG221/CUB/100/Jenks

² *Ibid.*

³UG 221 Stipulation.

- 1 I. Introduction
- 2 II. Interstate/Intrastate Storage
 - 3 A. Current Interstate/Intrastate Storage arrangement
 - 4 B. UG 221 Proposals to change Interstate/Intrastate Storage
 - 5 C. CUB's View of Interstate/Intrastate Storage
 - 6 D. CUB's Recommendation for Interstate/Intrastate Storage Sharing
- 7 III. Optimization:
 - 8 A. Mist Optimization Revenues Should Not Be Allocated to Interstate
 - 9 Storage
 - 10 B. Sharing percentage related to customer-financed gas and assets.
 - 11 C. Reporting income from optimization of regulated assets in the Results of
 - 12 Operations.
- 13 IV. Full Disclosure of all Costs and Revenues to all Parties
- 14 V. Conclusion: CUB's recommendations

15 Since there are separate and distinct customers of the Company's Regulated
16 Retail System and its Interstate Storage and Optimization program, CUB will use the
17 following terms to differentiate between the two groups of customers: customers of the
18 Company's Regulated Retail System will be referred to as "ratepayers" and customers of
19 the Company's Interstate Storage and Optimization program will simply be referred to as
20 "wholesale customers." So, even though NW Natural's Schedule 80 refers to gas in
21 Intrastate storage as "customer-owned gas," CUB will use the term "ratepayer" to reflect
22 anything associated with retail customers. Likewise while some think of resources,
23 which ratepayers have funded (rate base, gas supply, etc.) as customer-owned, CUB will
24 refer to those resources as ratepayer owned so as to limit any confusion with regard to
25 how NW Natural refers to certain gas in storage that is not owned by retail ratepayers but
26 is owned by wholesale customers, and stored on behalf of those wholesale customers in
27 Company storage facilities that also store ratepayer owned gas.

1 **II. Interstate/Intrastate Storage.**

2 **A. Current Interstate/Intrastate Storage arrangement**

3 NW Natural offers storage services both to interstate wholesale customers, under
4 FERC regulation, and to intrastate (within Oregon) wholesale customers based on OPUC
5 regulation. Currently, the net revenues produced by these activities are shared between
6 the retail ratepayers and the shareholders on a 20/80 basis (20% to the ratepayers/80% to
7 the Company shareholders). For clarity in this testimony, when we delineate sharing, we
8 will also always refer to the retail ratepayers' percentage first, and the shareholders'
9 percentage second.

10 The purpose of the storage service is described in the Company's 2012 10-k:

11 Transmission pipeline capacity and natural gas production are relatively
12 constant over the course of a year compared to the demand for natural gas,
13 which fluctuates daily and seasonally. Therefore, natural gas storage
14 facilities are needed to manage the flow and availability of gas supplies
15 during periods of low demand so these supplies can be stored and
16 delivered into markets during periods of high demand. We capitalize on
17 the imbalance of supply and demand and price volatility for natural gas by
18 providing our gas storage customers with the ability to store gas for resale
19 or use in a higher value period. Our natural gas storage facilities allow us
20 to offer customers "multi-cycle" storage service, which permits them to
21 inject and withdraw natural gas multiple times a year, providing more
22 flexibility to capture market opportunities.⁴

23 The explanation for the revenue sharing between shareholders and customers is
24 that storage at Mist is built off the current infrastructure and utilizes ratepayer owned
25 assets and personnel:

⁴ NW Natural 2012 10-K, page 8.

1 [T]he sharing for NW Natural's Mist Storage Services – which is set at
2 20% customers/80% Company - is intended to recognize the fact that the
3 incremental investment to provide these services was provided by
4 shareholders, while providing customers with benefits to reflect the shared
5 use of certain rate-based investments.⁵

6 By taking the incremental investment approach, NW Natural was able to
7 leverage sunk costs and avoid construction of unnecessarily duplicative
8 facilities. The Company's view was that the new potential non utility
9 revenues could be used to not only cover its incremental investment and
10 operating costs, but also could be partially shared with core utility
11 customers to help offset some of the sunk costs already imbedded in their
12 rates.⁶

13 **B. UG 221 Proposals to Change Interstate/Intrastate Storage.**

14 As noted, above, the UM 1654 docket grew out of the UG 221 docket when some
15 parties, including Staff and CUB, proposed changes to Storage and Optimization.⁷

16 Subsequently, all of the parties all agreed to this delayed examination of those issues in a
17 separate docket where there would be more time for review. But prior to that decision,
18 Staff had, in UG 221, proposed several recommendations regarding Interstate/Intrastate
19 Storage which merit review.

20 First, Staff proposed that NW Natural finance an independent review:

21 I recommend the Commission order NWN to conduct an independent
22 review of the operation and financing of the Mist storage facility since its
23 construction through an outside third party chosen by the Commission.
24 This review should be conducted over the six-nine months following the
25 final order in UG 221, with a report detailing the results and
26 recommendations of the reviewers delivered to staff and UG 221 Parties
27 no later than December 31, 2013.⁸

28 Second, Staff proposed that the sharing of off-system (both interstate and
29 intrastate) sales and service revenues be moved from 20/80 to 50/50 until that study was
30 completed:

⁵ UM 1654 - NWN/100/White/2-3.

⁶ UM 1654 - NWN/100/White/4-5.

⁷ UG 221 - Staff/1000/Zimmerman; UG221/CUB/100/Jenks.

⁸ UG 221 - Staff/1000/Zimmerman/12.

1 Until such time as new cost and sharing studies for the Mist off-system
2 (both interstate and intrastate) sales services can be completed, reviewed,
3 and approved by the Commission I have set the sharing percentage in
4 Schedule 185 at 50/50, with both NWN and core utility customers each
5 receiving 50 percent of net revenues as defined in the Schedule. This
6 should ensure fairness in sharing for both core customers and NWN.⁹

7 However, NW Natural disagreed then, and disagrees now, that the sharing
8 percentages should be changed to 50/50 stating that retail ratepayers are being
9 overcompensated at the current 20/80 sharing for interstate/intrastate storage:

10 Consequently, looking at the arrangement in hindsight, one could
11 conclude that the 20 percent customer sharing on Mist Storage Services -
12 together with the benefits of recall - may actually over-compensate
13 customers for the value they have provided.¹⁰

14 In addition, NW Natural states that if the sharing percentage for optimization
15 (currently 67%ratepayers; 33% shareholders) is reconsidered, it would recommend a
16 sharing arrangement more favorable to the shareholders for Interstate/Intrastate Storage:

17 However, if the Commission were inclined to revisit the sharing
18 arrangements on Optimization Activities, the Company believes that it
19 would also need to consider whether the Company percentage for Storage
20 Services should be adjusted to recognize the benefit to customers
21 associated with flexible recall - which we believe is undervalued in the
22 current sharing percentage.¹¹

23 The Company, conflates many issues in this statement, particularly, the classification of
24 assets and commodities allocated to Interstate/Intrastate Storage verses those allocated to
25 Optimization. Additionally, the company ad-hoc mentions some of the costs and benefits
26 of Storage and Optimization. Those costs and benefits (both to shareholders and core
27 retail ratepayers) need to be addressed and properly quantified.

⁹ UG 221 - Staff/1000/Zimmerman/18.

¹⁰ UG 221 - NWN/100/White/17.

¹¹ UG 221- NWN/100/White/17-18.

1 **C. CUB's View of Interstate/Intrastate Storage**

2 When the Storage program and the related sharing mechanism were initially put
3 into place, over a decade ago, it was recognized that the use of Mist for
4 interstate/intrastate storage would result in use of assets that the Company's core retail
5 ratepayers had paid for, such as the North Coast Feeder and Miller Station.¹² NW
6 Natural could offer storage as an affiliated competitive enterprise but it would be required
7 to compensate the regulated entity, and its retail ratepayers, at the greater of cost or
8 market for the assets that it used. The Company proposed, and was awarded an
9 arrangement such that, after shareholders received full recovery of their costs and "broke
10 even," the Company would then begin to share 20% of net revenues with retail
11 ratepayers.¹³ The Company proposed that the sharing mechanism be initiated after the
12 'break even' point because it was concerned that "you could have a situation where
13 customers are benefiting while the company is losing money."¹⁴ The 20/80 sharing
14 mechanism was adopted because there simply was no real basis to determine the actual
15 costs – distribution pipelines, personnel costs, legal department, IT, O&M - that interstate
16 storage would put on the system - it was a new service. In fact, in initial memos working
17 with the Staff to develop the Storage program, the Company admits that "the basis for
18 using the 20% number is somewhat anecdotal" and the Company's consultant was unable
19 to find enough data to support an industry standard on sharing percentages or cost
20 recovery allocation mechanisms.¹⁵ More than 10 years have now passed with very little

¹² UG 221/Staff/1000/Zimmerman/13.

¹³ CUB Exhibit 106, at Section 1D.

¹⁴ CUB Exhibit 106, at Section 1D.

¹⁵ CUB Exhibit 106, at Section 1B.

1 work being done to review and clarify the justification for the parameters of this program.
2 The kind of review that CUB is proposing today is long past overdue.

3 The reasons for CUB's interest in a review today are fairly obvious. Multiple
4 parties with asymmetric information, different views and interests, have multiple assets
5 involving ongoing activities that entail complicated cost structures and significant
6 revenues. NW Natural states this interstate/intrastate storage contains a great deal of risk
7 and that the risk is fully on the Company and not its ratepayers.¹⁶

8 CUB is troubled by the Company's one-sided depiction of interstate/intrastate
9 storage. NW Natural continues to portray this as an activity that is fully funded by
10 shareholders, in which shareholders take all the risk, and through which retail ratepayers
11 are generously allowed to share. CUB disagrees with this portrayal. If assets funded by
12 retail ratepayers, and dedicated to serving retail ratepayers, are being used for this
13 activity, then it is not fair to say that this activity is fully funded by shareholders.

14 Ratepayers have and continue to contribute. If I was driving to Eugene from Portland,
15 and a friend asked if I could take him to Springfield, but he would cover the incremental
16 cost of going from Eugene to Springfield, it would not be fair to say that he fully funded
17 the trip to Springfield. The Company's wholesale storage endeavor benefits in many
18 ways from the regulated utility's assets, and therefore transmits some of these benefits to
19 its investors.

20 Our gas storage segment's short-term liquidity is supported by cash balances,
21 internal cash flow from operations, external financing, and, to a certain extent, funding
22 from its parent company.¹⁷ Not only does this quotation call into question what intangible

¹⁶ UM 1654 - NWN/100/White/13-15

¹⁷ NWN 2012 10-k, page 39.

1 benefits are available to the non-utility because of ratepayers, but it also calls into
2 question how the non-utility segment imparts risk to the utility segment, in the form of
3 altered debt/equity ratios, credit ratings and financing opportunities. Without the
4 ratepayer owned infrastructure, the interstate/intrastate storage services, as currently
5 operated by NW Natural, would not be possible.¹⁸ If an alternate program was pursued
6 by NW Natural, it would come with greater risk, and a greater cost.^{19, 20}

7 But make no mistake; while CUB finds flaws with the treatment of the programs,
8 CUB is not proposing that the storage and optimization programs are in fact worthless
9 ventures. On the contrary, CUB, simply argues that because of their evident value over
10 the past decade, arbitrary allocations of costs and revenues should be avoided and thus
11 changes to the programs are required at this time to ensure that sharing is based on
12 careful analysis of the cost, risk and benefit to both ratepayers and shareholders.

13 To address risk evaluation, consider the following: currently, shareholders get
14 recovery of their costs first. Only after those costs are covered, does the Company share
15 net revenues according to the 20/80 split. It is through the share of these excess revenues
16 that ratepayers may recover their share of ratepayer investment in storage (the value of
17 ratepayer owned assets that are being used in conjunction with this service). Since there
18 is sharing of net income each year, we know the shareholders are being fully
19 compensated. However, we do not know if there is enough sharing to compensate retail
20 ratepayers for the value of the assets, personnel and other items that the retail ratepayers
21 have contributed. No such cost-benefit study, comparing retail ratepayers' costs and

¹⁸ CUB Exhibit 106, Section 3A. The Company states that the Storage service cannot be provided by an affiliate under FERC jurisdiction.

¹⁹ If it would have come at a lower risk and cost, then the Company would have pursued that agenda originally.

²⁰ UM 1654 – NWN/100/White/4-5.

1 revenues with and without optimization storage has been provided by the Company to the
2 interested parties.

3 Part of the problem is that the determination of revenue available for sharing (net
4 revenue) is calculated with an inequitable consideration of shareholder costs verses
5 ratepayer costs. The Company defines net revenues as the revenues after NW Natural's
6 shareholders have recovered their costs, but before core retail ratepayers have recovered
7 their costs. The standard definition for net revenues would include the difference
8 between revenues and all costs.

9 Suppose, the value of the items that ratepayers contribute is worth \$3 million per
10 year and the net revenues are worth \$10 million. Then ratepayers are being asked to
11 subsidize Company storage and Optimization activities to the tune of \$1 million even
12 though shareholders are earning \$8 million from it (20% of 10 million equals \$2 million
13 and represents the ratepayer share that would partially offset \$3 million of ratepayer
14 costs). The Company admits that a rigorous analysis of the appropriate allocation of
15 costs has not been a practice.²¹

16 Rather than re-allocate the cost of base operations field personnel already
17 included in rates, customers receive a share of the earnings from Interstate
18 Storage. Any incremental costs attributable to the additional facilities and
19 capacity needed to provide Interstate Storage Services are directly charged
20 to that non-utility business segment. There is currently 1 incremental FTE
21 storage operations position that is charged to Interstate Storage.²²

22 Moreover, "all 'non-incremental' costs are assigned to the utility."²³ This is in
23 contrast with the Company's portrayal of the retail ratepayers as well compensated, and
24 possibly over-compensated, beneficiaries of the optimization and storage program.

²¹ UM 1654 - CUB Exhibit 104, at 5d.

²² UM 1654 - CUB Exhibit 107.

²³ UM 1654 - CUB Exhibit 108.

1 The Company does not fulfill its burden of proof in demonstrating how it
2 determines the "share of earnings" that ratepayers receive. However, from analysis of the
3 Company's 10-k reports over the past decade, it is clear that shareholders are recovering
4 their costs.²⁴

Year	Net Income for Shareholders from Gas Storage
2003	\$800,000
2004	\$600,000
2005	\$4,600,000
2006	\$5,900,000
2007	\$8,700,000
2008	\$8,400,000
2009	\$8,900,000
2010	\$6,100,000
2011	\$4,100,000
2012	\$4,500,000

5
6 Any sharing that occurs is triggered after shareholders have recovered the
7 incremental costs that they contribute, yet before ratepayers have recovered their share of
8 common costs contributed. Furthermore, the parties have been offered no method of
9 calculating whether retail ratepayers' costs are really being recovered.

10 **D. CUB's Recommendation for Interstate/Intrastate Storage Sharing.**

11 It seems clear that the current arrangement is not satisfactory to all parties.
12 Moreover, interested parties such as CUB, Staff, and NWIGU, are at a disadvantage for
13 finding an equitable arrangement because of the asymmetry of important information. In
14 the interests, however, of finding an equitable arrangement, CUB has two
15 recommendations for interstate/intrastate storage.

²⁴ NWN 2005, 2008, 2010, 2012 10-k.

1 First, NW Natural should be required to model interstate/intrastate storage in its
2 cost of service model (marginal cost analysis) to identify the share of system costs that
3 should be allocated to storage if it were treated like all other services that share in the
4 common investment. The Company should be required to hold a workshop before their
5 next cost of service study to discuss with parties the methodology for incorporating
6 interstate/intrastate storage into that study and to conduct this study before the
7 Company's next general rate case. Not only would this be beneficial in determining a
8 sharing arrangement, but it would also inform the parties as to the components of the
9 system that are driving costs and revenues, and therefore assist with identifying the value
10 of the interstate/intrastate storage process. This leads us to CUB's second
11 recommendation.

12 Second, CUB recommends the continuation of the current 20/80 sharing
13 mechanism on a *temporary* basis but only until the next rate case, when this issue can be
14 reexamined, with the assistance of the new cost of service study giving parties a real basis
15 to use in making future recommendations.

16 The Commission's granting of the first condition is integral to CUB's temporary
17 contingent support of the current sharing percentage

18 **III. Mist Storage Optimization**

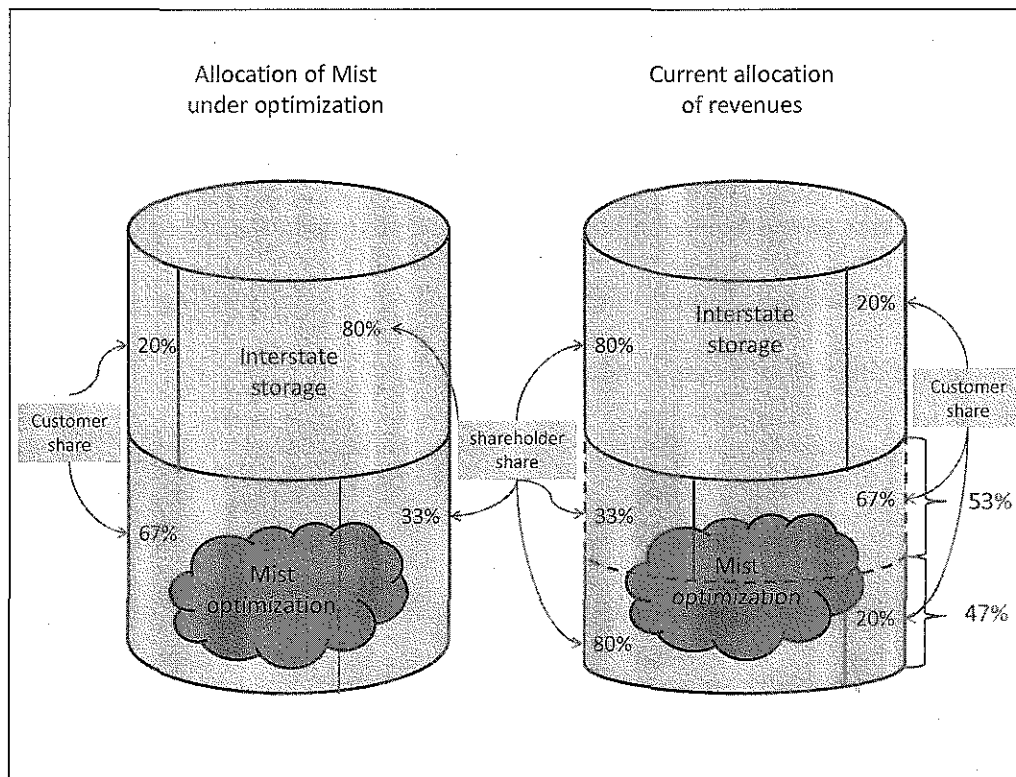
19 **A. Mist Optimization Revenues Should Not Be Allocated to Interstate Storage**

20 *i. What is Mist Optimization?*

21 NW Natural has an Asset Management Agreement with a third party (currently
22 Tenaska) to "optimize" its gas assets in the marketplace. While most of these activities
23 are conducted through Schedule 186 and concern assets that are fully retail ratepayer

1 owned, such as pipeline capacity and Jackson Prairie, the optimization of Mist Storage is
 2 conducted under Schedule 185 and is allocated between core retail ratepayers and
 3 interstate/intrastate sales based on the deliverability of gas currently stored at Mist.²⁵
 4 Currently the total Mist Deliverability is 520,000 Dth with 53% of that currently in rates
 5 to serve retail ratepayers. Based on this deliverability, NW Natural allocates 47% of the
 6 net revenues from Mist Optimization to Interstate/Intrastate storage (Schedule 186) which
 7 allows the Company to retain 80% of these net revenues rather than the 33% it is
 8 currently allowed for the optimization of ratepayer owned assets.

9 Consider the following diagram.²⁶



10

11 When Storage was built for Interstate marketing, it was built as an addition to the
 12 current Mist facilities. So you could imagine a depleted reservoir at Mist that was added

²⁵ UM 1654 - CUB Exhibit 103.

²⁶ Information utilized comes from CUB Exhibit 103, pg. 16.

1 on to, where both retail ratepayers and Interstate customers share capacity. The depiction
2 of the Mist storage facility on the left of the diagram treats the addition to the facility
3 (which holds interstate gas) as Interstate Storage. On the bottom, the portion of Mist
4 financed by retail ratepayers holds exclusively retail ratepayer gas. NW Natural's asset
5 optimization partner represents in its contract [REDACTED]
6 [REDACTED]²⁷ Therefore, in this
7 depiction, the gas in the ratepayer portion of Mist is Optimized according to a sharing
8 mechanism where the ratepayers are the owners of the commodity (the gas), and allow
9 the Company to share in a portion (33%).

10 On the other hand, consider the depiction of the Mist facility on the right side of
11 the diagram, which represents the current allocation approach. As in the representation
12 on the left hand side of the diagram, interstate storage, resulting from additions to the
13 Mist facility, is treated as a mostly shareholder owned asset, where retail ratepayers
14 receive only 20% after company costs are recovered to compensate retail ratepayers for
15 their contributions (including personnel, IT, security, O&M, etc.). However, the Mist
16 Optimization is divided up into what the company considers the wholesale storage
17 portion (20/80 split) and the retail ratepayer portion (67/33 split), even though the entire
18 bottom portion of the diagram contains all retail ratepayer gas. [REDACTED]

19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED] Hence the representation of retail ratepayer owned Mist as a Storage

²⁷ CUB Confidential Exhibit 102 "Natural Gas Asset Management Agreement Between Northwest Natural Gas Company And Tenaska Marketing Ventures, Article 3, Asset Management Agreement Description at Sections 3.1 and 3.3.

1 optimization facility is inaccurate, and therefore, misappropriates returns. Even the
2 terminology "Mist Storage (Optimization)"²⁸ suggests that storage is being optimized
3 rather than gas in storage.

4 The asset that is being optimized at Mist is retail ratepayers' gas, not the storage
5 capacity, and therefore retail ratepayers should be compensated according to a
6 Commission approved structure that recognizes full leveraging of retail ratepayer assets,
7 not shareholder storage capacity. Moreover, [REDACTED]

8 [REDACTED]
9 [REDACTED].²⁹ Given this clause, it is impossible to view NW Natural's
10 arrangement with its optimization partner in providing (as regarding Mist) anything other
11 than retail ratepayer [REDACTED].³⁰ [REDACTED]

12 [REDACTED] Moreover, [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]

16 In particular, the only gas that NW Natural owns is core retail ratepayer gas. If
17 the Company is able to leverage this gas in the marketplace at all, the only legitimate way
18 for the Company to do so under the current agreement is to allocate 67% to the ratepayers
19 for the use of their resources. There is other gas being stored at the Mist storage facility.
20 However, that gas is owned by third parties that contract with NW Natural to store it on
21 their behalf. Importantly, NW Natural does not take title to the gas that it stores for third
22 parties. This helps explain why NW Natural optimizes gas from Mist and Jackson Prairie

²⁸ UM 1654 - CUB Exhibit 103.

²⁹ UM 1654 - CUB Confidential Exhibit 102.

³⁰ UM 1654 - CUB Confidential Exhibit 102 at section 3.3.a.

1 (where the Company has ratepayer gas) but not Gill Ranch (where there is no ratepayer
2 gas).

3 *ii. Mist Optimization Involves Trading Gas, and the Only Gas NW Natural may*

4 *Trade is the Gas it Owns on Behalf of Its Retail Ratepayers.*

5 "NW Natural buys **no** gas for speculative purposes - it all must tie to its
6 utility business needs" ³¹

7 By declaration, NW Natural does not purchase gas for options trading or market
8 optimization. Moreover, FERC jurisdiction does not give the Company rights to the third
9 party gas that the Company holds on behalf of its intrastate/interstate customers ³².

10 Therefore, all the gas that NW Natural owns, and therefore has rights to, is owned by its
11 regulated utility retail ratepayers.

12 NW Natural describes how Mist Optimization works on pages 9 to 12 of Mr.
13 Friedman's testimony. ³³ The activities described are essentially arbitrage opportunities
14 that are made possible because NW Natural has gas supply to back up the arbitrage
15 opportunities. While much of the trading is done on paper and no gas is actually
16 delivered, and some of it involves the "same volumes in multiple transactions,"
17 ultimately NW Natural "is not caught "short" because the physical volumes exist at Mist
18 to backstop the trade." ³⁴ Those physical volumes are paid for by retail ratepayers – they
19 are not gas stored for interstate/intrastate purposes. Even if the parties purchasing these
20 contracts from NW Natural, via Tenaska, never choose to exercise their option to
21 purchase gas from NWN, the Company has an obligation to follow through on the
22 contract should the purchaser choose to exercise its option. There is nothing in Mr.

³¹ UM 1654 – CUB Exhibit 103 at slide 12.

³²The Company also states that it does not use any of the interstate/intrastate customer gas in its backdraft or optimization program. See CUB Exhibit 109.

³³ UM 1654 NWN/200/Friedman/9-12.

³⁴ UM 1654 NWN/200/Friedman/11-12.

1 Friedman's testimony on Mist Optimization that seems to involve the gas from
2 Interstate/Intrastate storage. NW Natural is optimizing gas that it has stored for its retail
3 ratepayers, but allocating approximately half of the revenue to Interstate/Intrastate
4 storage which has the effect of increasing the Company's share of these revenues and
5 reducing the ratepayers' share.

6 NW Natural provides an example of a Mist optimization activity called
7 "backdraft" where the Company sells gas at Mist in February that is not needed because
8 the peak heating season has passed, and replaces it with gas in April.³⁵ The difference
9 between the April and February prices creates value. But this example clearly is based on
10 gas that was stored for retail ratepayers.

³⁵ UM 1654 - NWN/200/Friedman/11, lines 13-24 to 12, lines 1-7.

1 The “backdraft” in this picture is the act of withdrawing gas (“drafting”)
2 after the February peak condition has passed by for use by an off-system
3 market while gas prices are still relatively high. The gas is returned back
4 to the Company at a later time and potentially at a different location when
5 prices are lower and there is more flexibility on the upstream pipeline
6 system. From a utility customer perspective, nothing has changed because
7 the gas is returned to inventory at the same price that it left. However, the
8 sale of the gas (in March in this example) and its purchase at a lower price
9 (in April in this example) generates revenue that would not otherwise have
10 been obtained from this asset. This simple example is potentially just a
11 sliver of the entire storage optimization transaction. The price spreads
12 between months are not static but widen and narrow on a day-by-day,
13 minute-by-minute basis. By anticipating these movements, i.e.,
14 speculating, our optimization partner can use these same volumes in
15 multiple transactions. That is, when the spreads between months are
16 relatively wide, the optimizer sells the spread. When the spreads narrow,
17 the position is closed out and some level of profits are realized. When the
18 spreads again widen, the position is sold again and the process repeats. If
19 the spreads never narrow but instead stay the same or continue to widen,
20 the optimizer simply waits for the physical settlement of the transaction
21 and is not caught “short” because the physical volumes exist at Mist to
22 backstop the trade.³⁶

23 NW Natural's description of Mist Optimization clearly depicts gas trades in order
24 to take advantage of price spreads that “widen and narrow on a day-by-day, minute-by-
25 minute basis.” Ultimately, this can only happen “because the physical volumes exist at
26 Mist to backstop the trade.

27 NW Natural is not allowed, under FERC jurisdiction, to backstop the trade with
28 gas that is stored under its Interstate Storage Tariff. That gas must remain in NW
29 Natural’s control and possession at all times after it is delivered to Mist and before it is
30 redelivered to the storage customer. Gas that is being used to “backstop a trade” would
31 no longer be considered to be in NW Natural’s control and possession. According to its
32 FERC Tariff (note: In the following excerpt, “customer” means the interstate storage
33 customer and “owner” means NW Natural, the owner of the storage):

³⁶ UM 1654 - NWN/200/Friedman/11, line 13-24 to 12, lines 1-7.

1 12.2 Possession. As between Customer and Owner, Customer shall be in
2 control and possession of the Gas prior to delivery to Owner for injection
3 at the Receipt Point(s) and after redelivery at the Delivery Point(s), and
4 shall indemnify and hold Owner harmless from any damage or injury
5 caused thereby. **Owner shall be in control and possession of the Gas**
6 **after the delivery of the same for injection at the Receipt Point(s) and**
7 **until redelivery by Owner to Customer at the Delivery Point(s), and**
8 shall indemnify and hold Customer harmless from any damage or injury
9 caused thereby, except for damages and injuries caused by the sole
10 negligence of Customer.³⁷ (**emphasis added**)

11 The only gas that NW Natural can trade is the gas that it owns and stores on
12 behalf of its retail ratepayers. The only gas that can be used to “backstop the trade” is the
13 gas it owns and stores on behalf of its retail ratepayers.

14 *iii. CUB Recommendation on allocation of Mist optimization resources*

15 NW Natural’s testimony makes clear that Mist Optimization is an activity that
16 involves trading gas that is stored at Mist in order to take advantage of intertemporal
17 price spreads. Because the only gas that NW Natural owns and has the legal right to
18 trade is the gas that it stores for the purpose of serving retail load, there is no basis to
19 assign 47% of the Mist Optimization revenues to Interstate/Intrastate Storage. Mist
20 Storage optimization should be moved to Schedule 186 along with the other optimization
21 activities that are using core retail ratepayer-owned assets.

22 **B. Optimization – Sharing percentage related to retail ratepayer owned gas and**
23 **assets.**

24 Currently, optimization revenues that are developed from ratepayer-owned items
25 are shared with retail ratepayers receiving 67% and the Company receiving 33%. This
26 sharing percentage has been in place for more than 13 years.³⁸ Originally, this
27 mechanism was put in place in order to provide an “incentive for the company to

³⁷ MIST STORAGE SERVICE OPERATING STATEMENT, NW Natural FERC tariff, page 17. Accessed
at: https://www.nwnatural.com/uploadedfiles/mist_interstate_operating_statements.pdf.

³⁸ UM 1654 – CUB Exhibit 110: Staff Memo, April 25, 2000 Public Meeting, Agenda Item 2.

1 optimize the market value of the resources NW Natural has acquired to support core
2 customer loads.”³⁹

3 While this may have been seen as a reasonable incentive before third-party
4 optimization became an established and routine part of NW Natural’s business, CUB
5 believes that it is no longer reasonable and should be adjusted. We discuss the basis for
6 our recommendations below.

7 *i. Utilities are Expected to Manage Retail Ratepayer-Owned Resources for the*
8 *Benefit of Retail Ratepayers.*

9 Utilities are expected to manage retail ratepayer owned resources for the benefit
10 of retail ratepayers. This means considering the costs and benefits of all available
11 opportunities for retail ratepayer-owned resources. As energy production has become
12 more-and-more of a market activity, utilities are expected to participate in those markets
13 to create value for retail ratepayers. The following sections contain a few examples of
14 activities that utilities are expected to take on as part of their routine operations, without
15 any special incentives. The net revenues from these activities are used to reduce retail
16 ratepayer rates (often on a forecasted basis). Sharing with shareholders is neither
17 required nor expected. Taking ratepayer resources to generate shareholder payments
18 above and beyond the Company’s ROE can be viewed as the ratepayers subsidizing
19 shareholder investment, which seems to distort incentives. The goal of operating more
20 efficiently, mitigating rate shock and generally performing better in their jurisdiction is
21 incentive enough. CUB provides several examples below of utilities optimizing assets as
22 an expected part of asset management, without requiring a “cut” of the revenues:

³⁹ *Ibid*, pg 3.

1 **a. Sales for Resale.**

2 Electric utilities generally no longer dispatch their power plants solely to service
3 load, but dispatch them whenever market conditions are advantageous. This functionality
4 is built directly into their dispatch modeling software and resource planning.⁴⁰ In order to
5 maximize the value of the assets that are financed by retail ratepayers, electric utilities are
6 expected to sell power into the wholesale market whenever there is a margin on that sale.
7 For a natural gas combustion turbine, this means the electric company is closely
8 monitoring the wholesale price of electricity, and the wholesale price of gas to determine
9 if running a power plant will generate a margin. In Oregon, the revenues for these sales
10 are forecast through the annual power cost cases and passed through to retail ratepayers
11 with no allocation to shareholders. Variances from that forecast flow through the Power
12 Cost Adjustment Mechanisms, which require utilities to absorb a large portion of the
13 differential between forecasted and actual costs, before retail ratepayers share in those
14 variances. This means that retail ratepayers generally receive 100% of the revenues on a
15 forecasted basis and the utilities take a significant risk on whether this forecast is
16 accurate.

17 **b. Arbitrage.**

18 As a principle of resource optimization, utilities are also expected to engage in
19 price arbitrage where it is possible on their systems. PacifiCorp's workpapers to their
20 TAM filing each year show significant buying and selling for the purpose of arbitrage (as
21 opposed to system balancing). This arbitrage activity is very similar to the arbitrage
22 activities of NW Natural. The main difference being that Pacificorp's retail ratepayers
23 receive 100% of the forecasted net revenues.

⁴⁰ PGE's Monet for example.

1 **c. Pipeline capacity arbitrage.**

2 Northwest Natural is also not alone in the Northwest in using pipeline capacity for
3 resource optimization and arbitrage. However, Northwest Natural is different in the way
4 it treats the revenue from these activities. PGE has natural gas supply from both Sumas
5 and the Rockies for its natural gas combustion turbines. Historically this has allowed
6 PGE to create an arbitrage opportunity by taking advantage of the price differential
7 between these hubs and to use this to reduce the fuel cost charged to retail ratepayers.
8 This activity is forecasted in PGE's annual AUT process and retail ratepayers receive
9 100% of the forecasted net revenues. This is very similar to what NW Natural calls
10 "pipeline optimization." The Company has not demonstrated the logic in expecting to
11 retain a large share of the optimization, when it has not demonstrated a fundamental
12 difference between itself and an electric utility which is expected to optimize its pipeline
13 capacity wholly on behalf of retail ratepayers

14 **d. Phone Directories (Yellow Pages Advertising)**

15 Phone books used to be an asset of the regulated, monopoly telephone company
16 and phone companies were expected to market yellow pages advertising, and use that
17 revenue from that advertising, to reduce the costs of the phone network on behalf of
18 customers.

19 **e. Other.**

20 Finally, we note that in any rate case, there is a section of the proceeding which
21 deals with other revenue. This is revenue that comes from a variety of sources—pole
22 attachments to advertising in bills – and is forecasted and 100% of the forecast is
23 allocated to retail ratepayers.

1 *ii. Under traditional rate of return regulation optimization revenues would be*
2 *forecast in with customers getting 100% and the Company receiving benefits only*
3 *when it has more revenue than forecasted.*

4 Traditionally, under rate of return regulation, a utility makes its profits from earning a
5 return on the equity it invests in the utility system. Costs of providing service, and
6 revenues generated by utility assets, flow through to customers. Customers pay the costs
7 of maintaining the assets and receive any revenue generated by these assets.

8 Typically this is done on a forecasted basis. In Oregon, forward-looking test years are
9 normally developed, with costs forecasted based on historic results adjusted for any
10 known and measurable changes. Some variable costs associated with power generation
11 or natural gas supply are trued up by various mechanisms.

12 *iii. For non-forecastable items, the Commission has allowed utilities to retain 5% of*
13 *value.*

14 The primary exception to the expectation that retail ratepayers receive 100% of
15 the value of revenue derived from retail ratepayer owned assets is a series of cases where
16 the PUC has allowed utilities to retain 5% of the income associated with certain one-time
17 only activities as a way to incent the utility to maximize the value of that one-time
18 activity.

19 A good example of this was the sale of the Centralia coal plant by PacifiCorp.
20 PacifiCorp was a partial owner of that plant until the plant was sold to TransAlta in 2000.
21 In those dockets, PacifiCorp argued that the proceeds should be shared based on the
22 depreciation reserve method which would allow the Company to retain 36% of the gain:

23 This method is based on the relationship between net plant and gross
24 plant. It establishes the percentage of the capital costs of the Plant which

1 has been recovered over time through rates and the percentage of these
2 costs that remains on the Company's books. These percentages are then
3 multiplied by the overall gain to establish the "sharing ratio." Using this
4 methodology, PacifiCorp calculates that customers in Oregon should
5 receive 64 percent of the Oregon-allocated portion of the gain and
6 shareholders 36 percent.⁴¹

7 The Commission rejected PacifiCorp's request, both on principle and in spirit, and
8 instead ordered that the utility be allowed to retain no more than 5% of the gain:

9 We agree with Staff, both as to the policy issue and as to the specific
10 application of that policy to this case. The five-percent maximum
11 suggested by Staff is in a general sense consistent with our treatment of
12 so-called transition costs/benefits in the recent PGE restructuring case. The
13 gain in the present case is not a transition benefit, but the purpose behind
14 giving the Company a share is the same as it was in UE 102: to provide an
15 incentive to the utility both to enhance the value of the plant and to use an
16 asset sale process that is most likely to obtain the best price.⁴²

17 NW Natural's return in these Storage and Optimization activities violates the Pacificorp
18 example in two ways. This is neither a one-time operation, nor is the Company taking a
19 small share of 5%.

20 ***iv. Company claims of large risk are not demonstrated.***

21 NW Natural claims that there are significant regulatory risks associated with
22 optimization:

⁴¹ OPUC Order No. 00-112, pg 4.

⁴² *Ibid.* at 10.

1 In addition to the normal business risks associated with any venture, there
2 are several risks that are unique to these more complex and speculative
3 activities. One major risk specific to Optimization Activities is regulatory
4 risk. To discourage anticompetitive behavior by market participants,
5 FERC has enacted a complex framework of policies and regulations
6 governing the types of optimization activities that the Company is engaged
7 in. Of course NW Natural intends and endeavors at all times to comply
8 with FERC's mandates. However, the rules - like the activities to which
9 they apply - are extremely complex, and their application by FERC is not
10 always predictable. Accordingly, the risk of compliance is always a
11 concern.⁴³

12 Unfortunately, NW Natural offers little evidence to demonstrate the size and value of this
13 risk. Citing a single risk associated with optimization tells us little. It needs to be
14 quantified and compared to the gains the Company is achieving from ratepayer owned
15 assets. NW Natural does tell us that it is working to minimize the risk:

16 Specifically, with respect to FERC compliance risks, the Company
17 maintains a number of governance and oversight mechanisms, coupled
18 with annual training to reinforce what forms of transaction structures are
19 acceptable.⁴⁴

20 Of course, these governance and oversight mechanisms are either paid for by
21 retail ratepayers as part of the common costs that retail ratepayers contribute or they are
22 considered incremental costs and get recovered before any sharing with retail ratepayers.
23 So while NW Natural claims that shareholders are taking on significant risk, it is retail
24 ratepayers who are paying to manage that risk. Does this risk, and the actions the
25 Company has taken to minimize it, rise to the level that NW Natural should be allowed to
26 retain 33% of the net revenues that are generated with assets that are financed by retail
27 ratepayers? The Company has failed to demonstrate that it is.

28 In addition, it should be recognized that the risk should decline as the Company, its
29 employees and its agents gets more experience with the activity. When these activities

⁴³ UM 1654 - NWN/100/White/12, lines 5-13.

⁴⁴ UM 1654 - NWN/100/White/14, lines 13-15.

1 began, there was uncertainty as to their value. But after more than 13 years of
2 optimization activities, and no significant FERC compliance issues, this is no longer a
3 start-up project with a lot of risky unknowns. This is a sustainable and predictable
4 activity that has not had trouble with FERC.

5 **v. *CUB recommendation***

6 In the UG 221 docket, CUB recommended 90-10 for schedule 186 with customers
7 receiving 90%. However, because our investigation of this issue has led us to conclude
8 that NW Natural has been misallocating net revenues from Mist Optimization to
9 interstate/intrastate storage, and CUB is recommending correcting that misallocation,
10 CUB is modifying our proposal for sharing.

11 CUB recognizes that a proposal to shift the sharing from 67-33 to 90-10, coming
12 along with shifting 47% of Mist Optimization Revenues from 20-80 to 90-10, while fair
13 will still be a significant adjustment to the amount of optimization revenues the Company
14 receives. Because of the total effect of combining these two changes, CUB believes that
15 the Commission could decide to phase in the sharing percentage at 90-10 sharing, by first
16 moving it to 80-20 today and then moving it to 90-10 in the next rate case. This is similar
17 to how the Commission looks at rate shock associated with rate classes. While a cost of
18 service study may show that one customer class is not paying its full cost of service, the
19 rate changes associated with getting that class to cost-of service rates can be phased in
20 over multiple rate cases.

21 Thus CUB's overall recommendation is that the sharing percentage for
22 Optimization net revenues be changed with 90% going to retail ratepayers, but recognizes
23 that the PUC may wish to phase this in by setting the sharing at 80-20 today with the

1 expectation that this will be reexamined in the next rate case, after a thorough exploration
2 of the subject with supporting data, where there will be the opportunity to make further
3 changes.

4 **C. Reporting income from regulated assets in the Results of Operations.**

5 CUB also takes issue with how income from these activities is reported in the
6 Results of Operations. CUB believes that income earned off of ratepayer-owned assets is
7 utility income, regardless of whether that income came from retail ratepayers or from
8 arbitrage. NW Natural has two business units:

9 Our business model primarily consists of two core businesses: local gas
10 distribution, referred to as our "utility" business segment, which serves
11 residential, commercial, and industrial customers in Oregon and southwest
12 Washington; and gas storage, referred to as our "gas storage" business
13 segment, which serves utilities, gas marketers, electric generators, and
14 large industrial users. The utility business represents approximately 90%
15 of our consolidated assets and net income, while our gas storage business
16 accounts for a majority of the remaining 10%. We also have other
17 business and investment activities, which ⁴⁵we aggregate and refer to as
18 our "other" segment and which accounts for less than 1% of consolidated
19 assets and net income. We refer to our "gas storage" and "other" business
20 segments as "non-utility."⁴⁶

21 However, optimization revenues, with the exception of the amount that is shared
22 with retail ratepayers are considered part of the gas storage rather than the utility
23 business:

⁴⁵ NW Natural 2012 10-k, at 3. Accessed at
https://www.nwnatural.com/content/annualreport/2012/files/10k_2012.pdf

⁴⁶ *Ibid.*

1 We contract with an independent energy marketing company to provide
2 asset management services, primarily through the use of commodity
3 transactions and pipeline capacity release transactions, the results of which
4 are included in the gas storage business segment, except for amounts
5 allocated to our utility pursuant to regulatory sharing agreements
6 involving the use of utility assets.⁴⁷

7 This is highly unusual. The “commodity transactions and pipeline capacity
8 release transactions” both represent retail ratepayer owned assets being used to generate
9 income. It is standard operating procedure for utilities to report income earned from
10 retail ratepayer owned assets as utility income. Earning associated with sales for resale,
11 arbitrage and other activities built off the system are considered utility income for other
12 utilities. If a utility is able to take a rate based asset and use it to earn revenue, but not
13 report that as utility income, then that utility has an opportunity to earn above its
14 authorized rate of return. Last December, the PUC set a new ROE for NW Natural.
15 This represents an amount that the PUC feels it is reasonable for the Company to be
16 allowed to earn off of its investment in rate base assets. But if the Company has millions
17 of dollars in additional earnings gained off of those same assets that it is not reporting,
18 then the Company is really being allowed to earn above its authorized level in a
19 systematic way.

20 Mist contains both storage for retail ratepayers and interstate/intrastate storage.
21 For the retail ratepayer storage, the cost of the investment is in rate base and retail
22 ratepayers pay the O&M costs associated with maintaining the facility. While retail
23 ratepayers receive 2/3 of the net income from the Mist Optimization that NW Natural
24 allocates to the regulated utility, NW Natural does not book the 1/3 that it retains as
25 utility income, even though this is income produced with rate-based assets.

⁴⁷ NW Natural 2012 10-k, page 34.

1 CUB is not sure when the decision was made to exclude these from utility
2 earnings in the Results of Operations. Our review of orders and Staff Public Meeting
3 Memos has not turned up anything that reflects this decision. CUB also is not aware of
4 what the argument would be for not requiring this income to be reported.

5 The Company might claim that because of earning sharing mechanism, including
6 this as income could require the Company to further share it under one of those
7 mechanisms, thus reducing the incentive associated with the sharing mechanism. But
8 because the Company does not know what its earning will be, it does not know if its
9 earnings sharing will affect the sharing of optimization revenues, so it will still have an
10 incentive to undertake these activities.

11 More importantly, these are earnings that are being produced by retail ratepayer
12 owned assets. They are utility earnings. Effective utility regulation requires transparency
13 and NW Natural should not hide the earnings that it receives from its retail ratepayer
14 owned assets by treating these earnings as “non-utility.”

15 ***i. CUB Recommendation***

16 Optimization revenues grow out of the retail ratepayer-owned gas stored at Mist
17 and Jackson Prairie, or the customer-owned pipeline capacity. Optimization revenues
18 should be considered utility income and should be reported as part of the results of
19 operations.

20 Interstate/Intrastate storage uses some retail ratepayer-financed assets, but
21 requires additional investment by the utility. Currently, by the Company's own
22 admission, contributions by the ratepayers and shareholders, including common costs and

1 opportunity costs have not been fully analyzed, or tracked.⁴⁸ At least until there is a more
2 informative cost-of-service study associated with this activity, CUB believes that it is
3 reasonable for this to be reported as non-utility income.

4 **IV. Full disclosure of all costs and revenues for all parties**

5 Since both NW Natural and Tenaska are profiting from the use of retail ratepayer
6 financed assets, CUB finds it completely reasonable, before any decision is made
7 regarding sharing, to demand a full report of all revenues to all parties involved, since the
8 beginning of the program. By CUB's recollection from the NW Natural Optimization
9 workshop, the Company portrayed the sharing as follows. The optimization partner,
10 Tenaska would take its [REDACTED] cut before paying the remaining amount to NW Natural.
11 Then, the Company would split that amount between the shareholders and the retail
12 ratepayers, according to its predicated 20/80 or 67/33 rule. For instance, this would
13 mean, in the case of Optimization that core retail ratepayers would receive just under half
14 of the proceeds from the leveraging of their gas⁴⁹. Also, for Storage proceeds, retail
15 ratepayers would receive approximately 13%⁵⁰. However, upon reading the NW Natural-
16 Tenaska contract, one sees that the payments are much more complicated than that. For
17 example, [REDACTED]

18 [REDACTED]⁵¹ [REDACTED]

19 [REDACTED]

20 [REDACTED]⁵² [REDACTED]

⁴⁸ See CUB Exhibits 104 and 105.

⁴⁹ $(1-1/3) \times 2/3 = .45$

⁵⁰ $(1-1/3) \times .20 = .13$

⁵¹ UM 1654 - CUB Confidential Exhibit 102, at Section 5.1 (pg 8).

⁵² UM 1654 - CUB Confidential Exhibit 102 at Section 5.2(ii) (pg 9).

1 [REDACTED]⁵³ [REDACTED]

2 [REDACTED]

3 [REDACTED].⁵⁴ This complicated structure (1) is not necessarily equivalent to 1/3 Tenaska
4 and 2/3 NW Natural and (2) means that it is possible that Tenaska earns more from the
5 retail ratepayers' gas than the retail ratepayers do. At the very least, this introduces the
6 need for the Company to be transparent about the quantity of assets being leveraged and
7 the revenue flowing to all parties as a result.

8 **V. Conclusion**

9 In conclusion, CUB would like to offer a comprehensive plan for addressing
10 Interstate and Intrastate Storage and Mist Optimization going forward. First and
11 foremost, CUB sees full information, in the form of a regularly performed cost of service
12 study as an invaluable tool to making equitable and informed decisions about the
13 treatment and allocation of these activities. CUB believes that the parties can agree on
14 the elements necessarily included in a cost of service study that would properly inform
15 decisions about asset activity classification and revenue sharing. That is, CUB
16 recommends that in this docket, a schedule for the original cost of service study and
17 updates be decided, beginning with the cost of service study due at the end of this year.
18 That cost of service study must include costs and revenues for Storage and Optimization
19 activities, and a full breakdown of costs borne by ratepayers and shareholders. Moreover,
20 in the interest of reaching an informed decision, CUB recommends that the Company
21 should hold workshop sessions demonstrating to all parties how all costs and revenues
22 are analyzed.

⁵³ UM 1654 – CUB Confidential Exhibit 102 at section 5.

⁵⁴ *Ibid.*

1 In the case of Storage, CUB recommends that following the cost of service study,
2 the parties convene to make an informed decision about sharing arrangements. Because
3 CUB recognizes that this will take some time, CUB supports maintaining the current
4 structure for a limited time. CUB's only major contention with the current storage
5 sharing arrangement is that revenues from Mist gas Optimization are treated as storage
6 revenues.

7 Therefore, in the case of Mist Optimization, CUB recommends firstly, that all of
8 the revenues coming from Mist Optimization be classified as Optimization and be moved
9 to schedule 186. Ultimately, CUB recommends the same sharing percentage that was
10 recommended in UG 221, of 90% to ratepayers and 10% to shareholders, with the
11 understanding that this structure may need to be phased in. This sharing still provides
12 plenty of incentive to shareholders to maximize the value from ratepayer resources, but
13 recognizes more fully the ownership of the assets.

14 Central to all of CUB's recommendations is the idea that full information
15 disclosure will assist all parties in making equitable, transparent, and agreeable solutions.
16 In this interest, CUB supports all efforts in this direction, including, cost of service
17 analysis, workshops and increased communication and participation from all parties.

UM 1654 – CERTIFICATE OF SERVICE

I hereby certify that, on this 19th day of August, 2013, I served the foregoing **RESPONSE TESTIMONY OF THE CITIZENS' UTILITY BOARD OF OREGON** in docket UM 1654 upon each party listed in the UM 1654 PUC Service List by email and, where paper service is not waived, by U.S. mail, postage prepaid, and upon the Commission by email and by sending one original and five copies by U.S. mail, postage prepaid, to the Commission's Salem offices.

(W denotes waiver of paper service)

(C denotes service of Confidential material authorized)

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Respectfully submitted,



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EXPERIENCE: Provided testimony or comments in a variety of OPUC dockets, including UE 88, UE 92, UM 903, UM 918, UE 102, UP 168, UT 125, UT 141, UE 115, UE 116, UE 137, UE 139, UE 161, UE 165, UE 167, UE 170, UE 172, UE 173, UE 207, UE 208, UE 210, UG 152, UM 995, UM 1050, UM 1071, UM 1147, UM 1121, UM 1206, UM 1209, UM 1355, UM 1635, UE 233, and UE 246. Participated in the development of a variety of Least Cost Plans and PUC Settlement Conferences. Provided testimony to Oregon Legislative Committees on consumer issues relating to energy and telecommunications. Lobbied the Oregon Congressional delegation on behalf of CUB and the National Association of State Utility Consumer Advocates.

Between 1982 and 1991, worked for the Oregon State Public Interest Research Group, the Massachusetts Public Interest Research Group, and the Fund for Public Interest Research on a variety of public policy issues.

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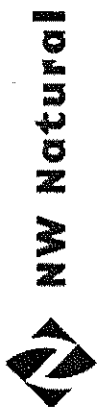
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Economics professor at Mesa Community College and the State University of New York from 2004 -2010.

UM 1654 - CUB Exhibit 102

CONFIDENTIAL



OPUC Workshop

Interstate Storage & Optimization Sharing (Schedules 185 and 186)

May 8, 2013



Topics

- ❖ Why are We Here?
- ❖ Our Perspective of the Sharing Mechanisms
- ❖ Optimization – What is It?
- ❖ Mist Interstate and Intrastate Storage Service
- ❖ The Connections to Schedules 185 and 186
- ❖ Summary and Next Steps



How Did We Get Here?

- Issues raised by Staff in UG 221
- Process involved some level of confusion and misunderstanding over the derivation and intent of the sharing mechanisms
- Parties continued to express concern, and all agreed to further review in 2013
- Stipulation left existing sharing mechanisms in place but agreed to a new docket with a decision to be issued by Dec. 31, 2013



Our Perspective

- The Optimization & Interstate Storage Sharing Mechanism has been working well for years
 - It is win-win, i.e., the company's success leads to greater savings for customers and earnings for shareholders
 - It creates alignment between customers and shareholders
 - It is fair in that it has proper incentives and expectations for risks versus returns
 - It protects customers against downside risks
 - It can avoid the argumentative pitfalls of a zero sum game by focusing on making the "pie" larger to the benefit of all

- We're open to ideas for improvement, but nothing is broken and somehow in need of fixing



What is Optimization?

- ❖ **Delivering Additional Value from the Gas Supply Portfolio**
 - ✓ Gas purchase contracts in B.C., Alberta, Rockies
 - ✓ Interstate Pipeline contracts
 - ✓ Contracted storage
 - ✓ Owned storage in Oregon (both in and outside of rates)

- ❖ **As context, there are two types of optimization**
 1. **Base Utility optimization**
 - These savings flow back to customers through the PGA
 2. **Enhanced Optimization (through asset management services)**
 - These savings are covered by Schedules 185 and 186
 - Go beyond normal utility activities
 - Are the subject of this workshop

- ❖ **When we talk about “optimization”, we’re generally talking about the second type**



Base Utility Optimization

- ❖ The Company first optimizes what it can through its gas acquisition activities. Within a PGA gas year, these include decisions over such things as:
 - Mix of supply basins and trading hubs to purchase from
 - First-of-month index supplies versus daily spot purchasing
 - Storage withdrawals versus spot market purchases
 - Storage injection timing – both during the normal summer fill season as well as any winter refill
- ❖ The Company believes it is important to retain these competencies in house
 - ❖ Back in the Enron heydays, many gas LDCs outsourced their entire gas acquisition function
 - ❖ We choose to retain these base utility capabilities and employ asset management services to capture the harder to obtain enhanced optimization values



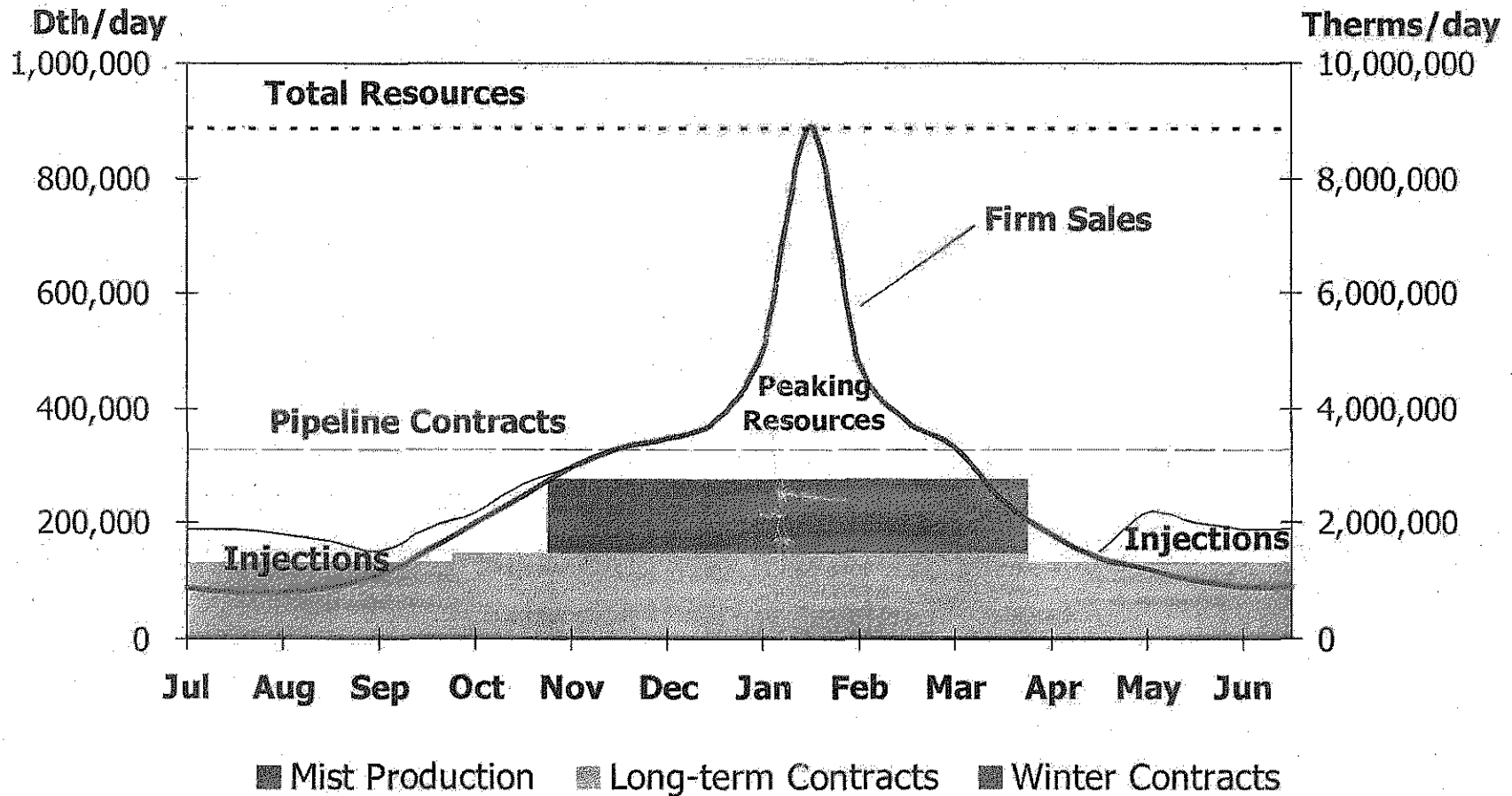
Enhanced Optimization

- ❖ Enhanced optimization using asset management services
 - Began in 2001, era of Enron bankruptcy, concerns over trading
 - Extends scope and range of activities conducted by Utility
 - Protects customers from higher risks
 - Sharing a piece of the “pie” with a partner makes sense if the partner can enlarge the pie significantly

- ❖ To capture value requires a larger market footprint and a more sophisticated trading platform than the Company has or could justify in order to provide utility service.
 - Some utility self-optimization of this nature was tried starting back in 1989, e.g., sharing on capacity release transactions and off-system sales
 - However, very low risk, very low revenues for many years



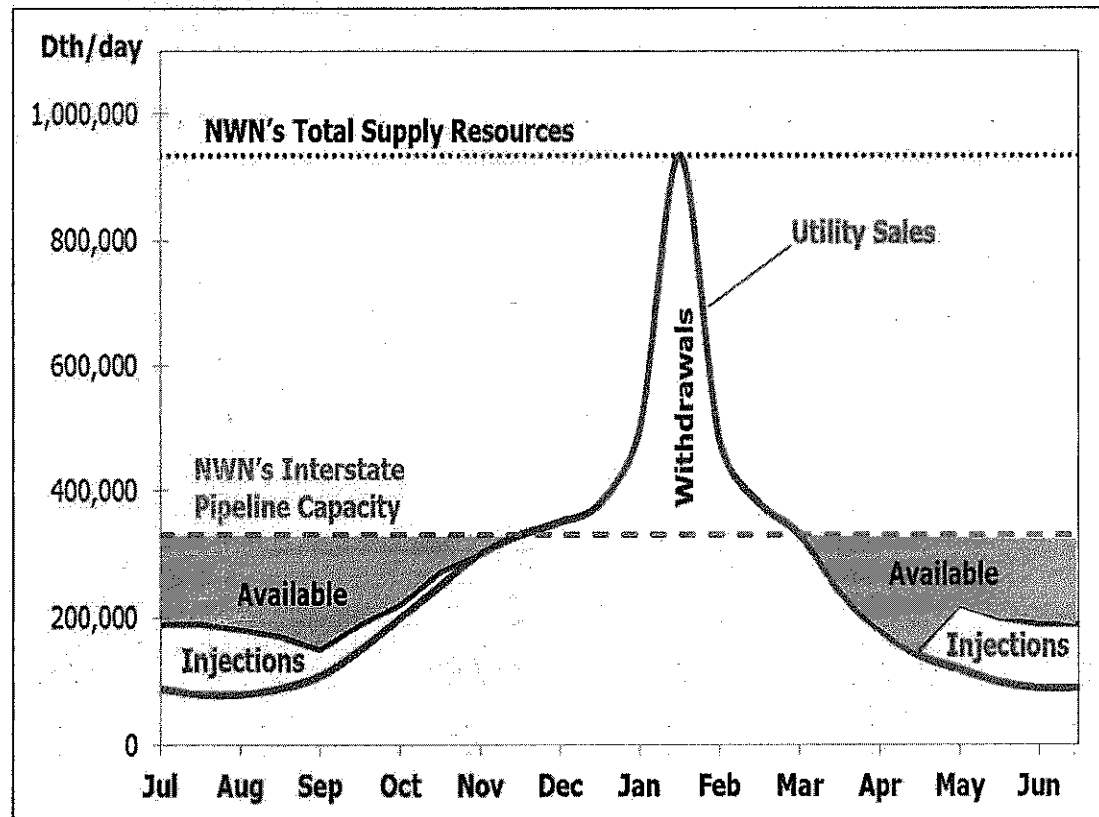
Starting Point - Portfolio Design





Optimization of Pipeline Capacity

- Pipeline subscription levels are based on cost analysis (e.g., IRP)
- Pipeline Capacity is essentially "Take-or-Pay"
- Available capacity typical of Winter Peaking Utilities
- Releases must be posted on pipeline EBBs to improve market efficiency

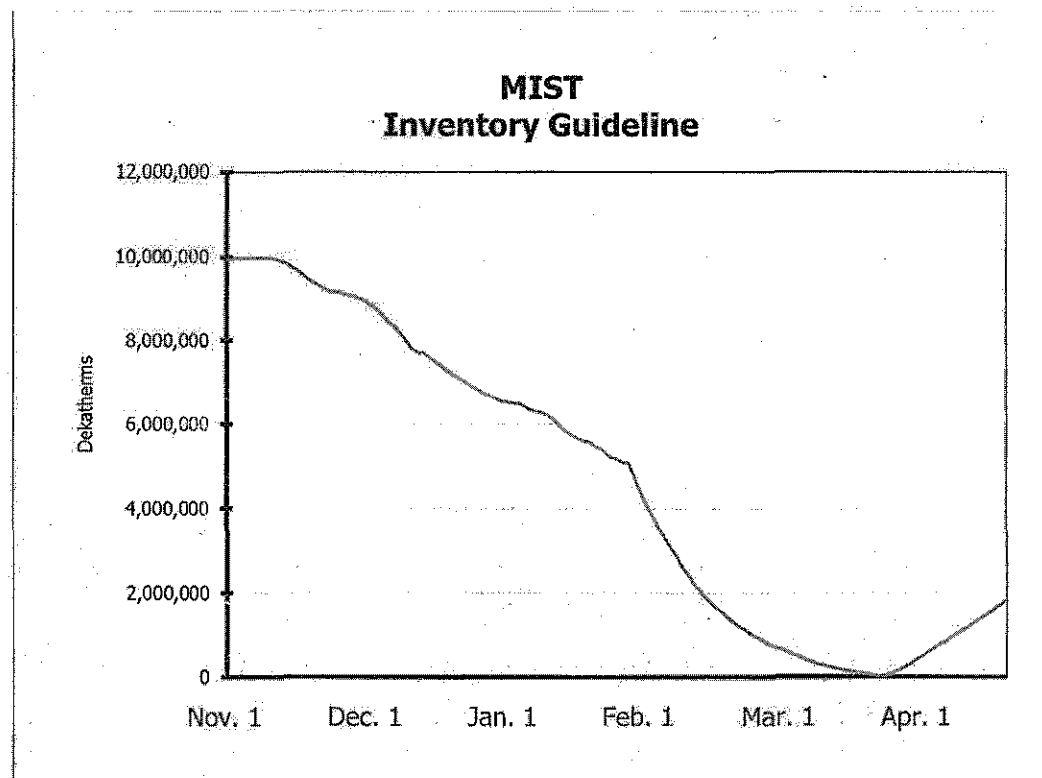


Question: How much can you charge for a good during times of surplus?
Answer: Not much.



Peaking Resource Utilization

- Physical characteristics include Deliverability and Working Gas Inventory
- For underground storage, Deliverability is a function of Working Gas Inventory
- Analysis (e.g., IRP) indicates that maximum Deliverability is needed for the Design Peak Day
- Design Peak Day occurs late in the winter

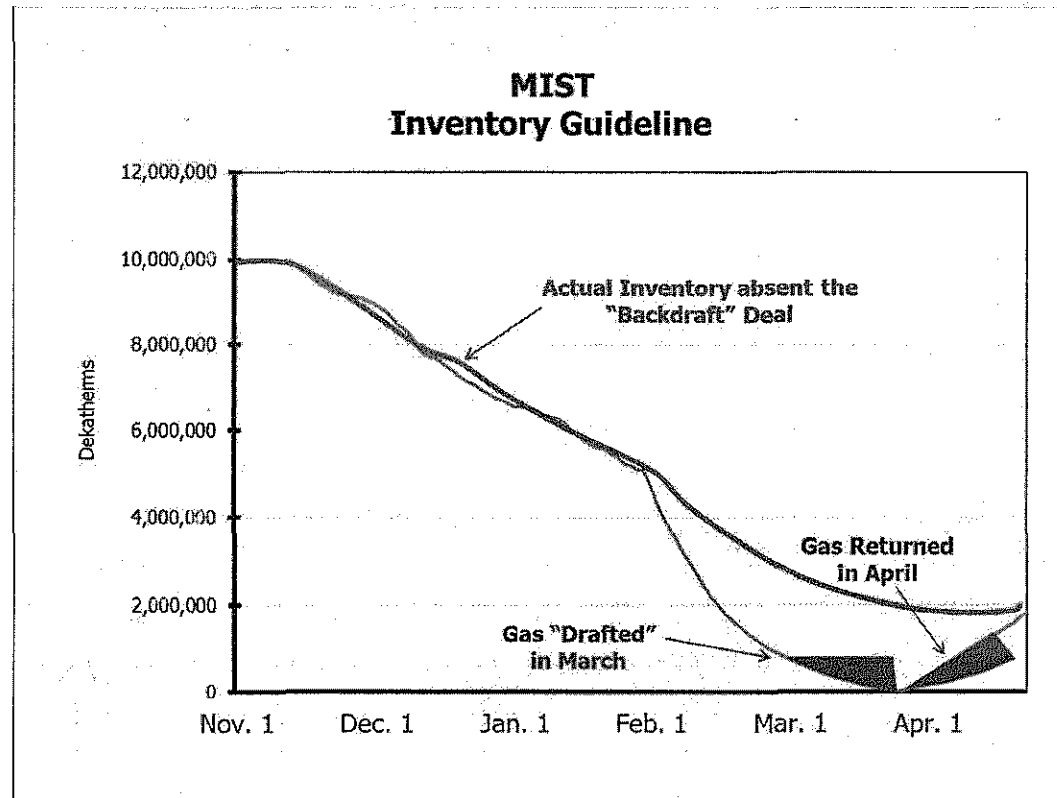


Inventory guidelines developed to answer the question: On any given day, how much gas should be in inventory if the rest of the winter fits the cold weather design?



Optimization of Storage

- Some amount of Working Gas will be left in Storage at the end of winter under most scenarios
- The key is to find more demand for Storage gas late in the winter
- Late Winter spot market prices can be higher than in the Spring

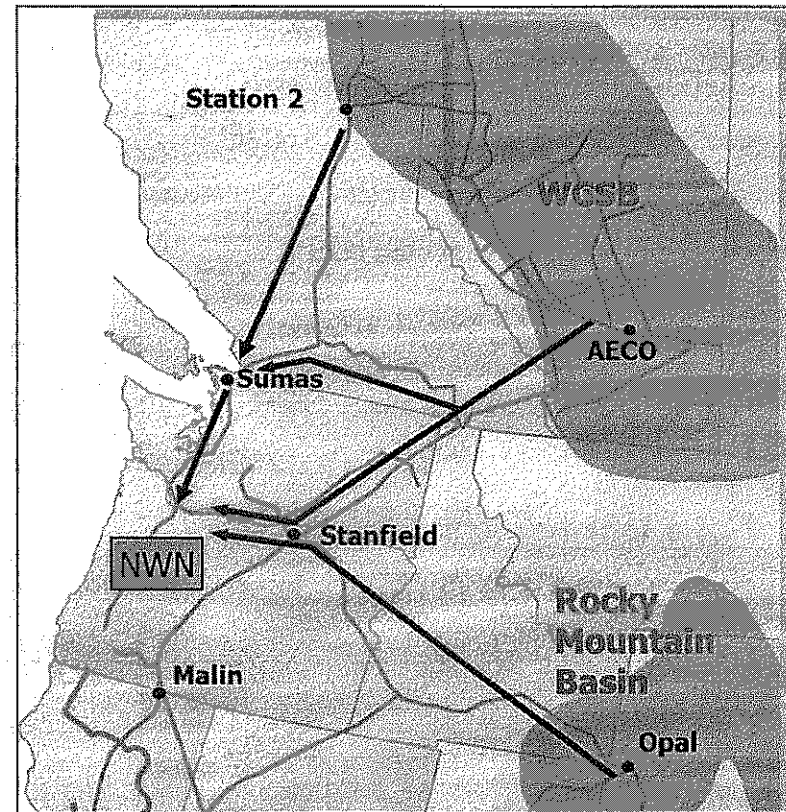


Question: How do you arbitrage price spreads without putting customers at risk?
Answer: The Company and Optimization partner take on the speculative positions that go beyond Utility constraints.



Portfolio of Gas Commodity Contracts

- NW Natural buys gas at a variety of trading points with differing levels of liquidity
- Gas is purchased under a variety of contract terms
- Roughly half the gas is purchased on the spot market (from 1 day up to 1 month in duration)
- NW Natural buys **no** gas for speculative purposes – it all must tie to its utility business needs

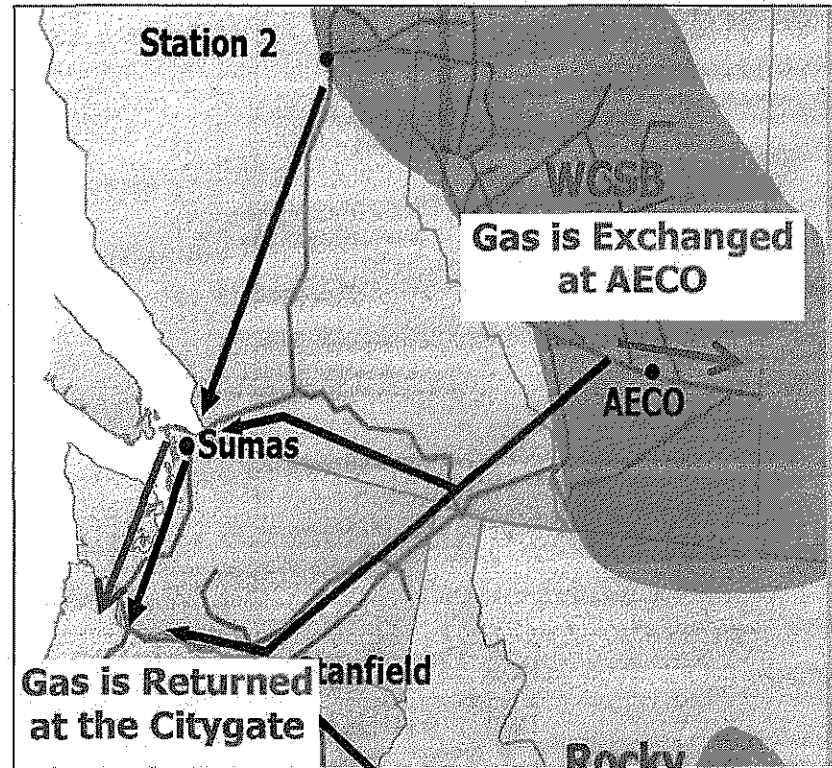


Question: How can you arbitrage a portfolio of supply contracts when speculative buying and selling is not allowed as a utility function?
Answer: Structure as natural gas exchanges with your optimization partner.



Portfolio Example – Liquids Extraction

- Natural gas liquids (NGLs) refer to propane, butane and other elements that are part of gas production and can be profitably extracted in the form of liquids
- Extraction of NGLs is profitable because their prices tend to track oil rather than natural gas (methane)
- In Alberta, most NGLs are extracted downstream of the AECO trading hub
- NGL prices are much better on the eastern side of Alberta



Question: What activities does the Optimization partner perform?

Answer: NGL plant contracts, gas sales to eastern Canadian/U.S. markets, and the acquisition of replacement gas volumes for delivery to NWN's citygate



What is meant by Interstate Storage?

- ❖ Mist assets not covered by PGA or General Rates
 - Began in 2001 with issuance of FERC 284.224 certificate for Interstate Storage Service for Off-System customers
 - Includes transportation across NWN's Distribution System to interconnections with Interstate Pipelines
 - Uses capacity developed in advance of Core Utility need
 - Revenue Sharing has been just one of the many benefits received by Utility Customers from the development and subsequent Recall of Interstate Storage capacity:
 - ✓ No Development risks - reservoirs, pipelines, permitting, etc.
 - ✓ No Timing risks - Recalls made with only 1 year advance notice
 - ✓ Lumpy additions are avoided - Recalls are sized in increments of 5,000 Dth/day
 - ✓ Assets flow into rates at net book value



What is meant by Intrastate Storage?

- ❖ Allows firm On-System Transportation Customers to access Mist Interstate Storage Service
 - Established through Rate Schedule 80
 - Developed in response to a marketer with 284 service who had a mix of Off-System and On-System Customers
 - Mirrors the same terms and conditions of 284 service
 - On-system Customers access the Mist service using their existing on-system agreements to transport the gas to their plant location(s)
 - Relatively small activity

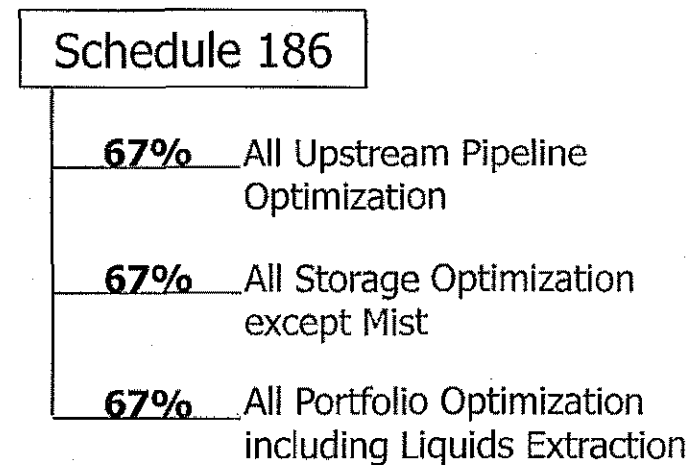
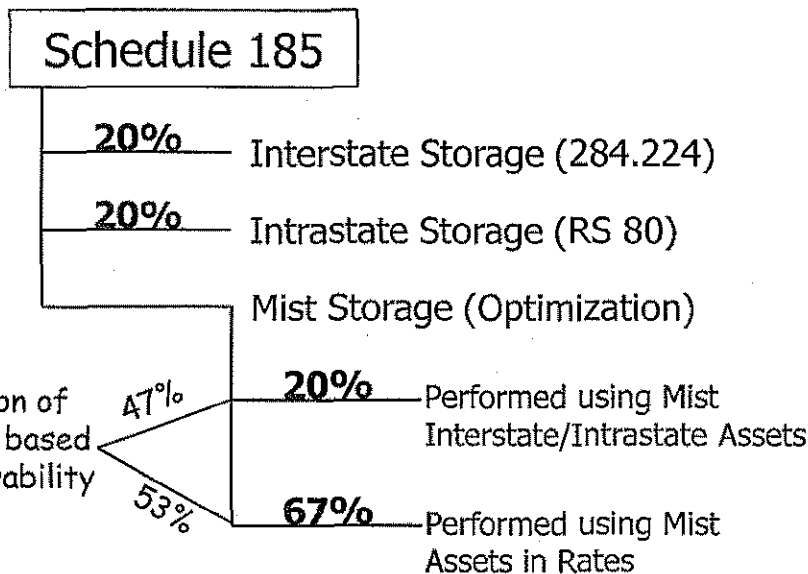
Note: The “Emerald” expansion at Mist will fall into a new category that will need to be discussed at a later date because it fundamentally differs from the smaller incremental expansions that created the 284.224 and related RS 80 services



The connections to Schedules 185/186

Schedule 185 – think Mist Storage
Schedule 186 – think everything else

Sharing Percentage to Customers

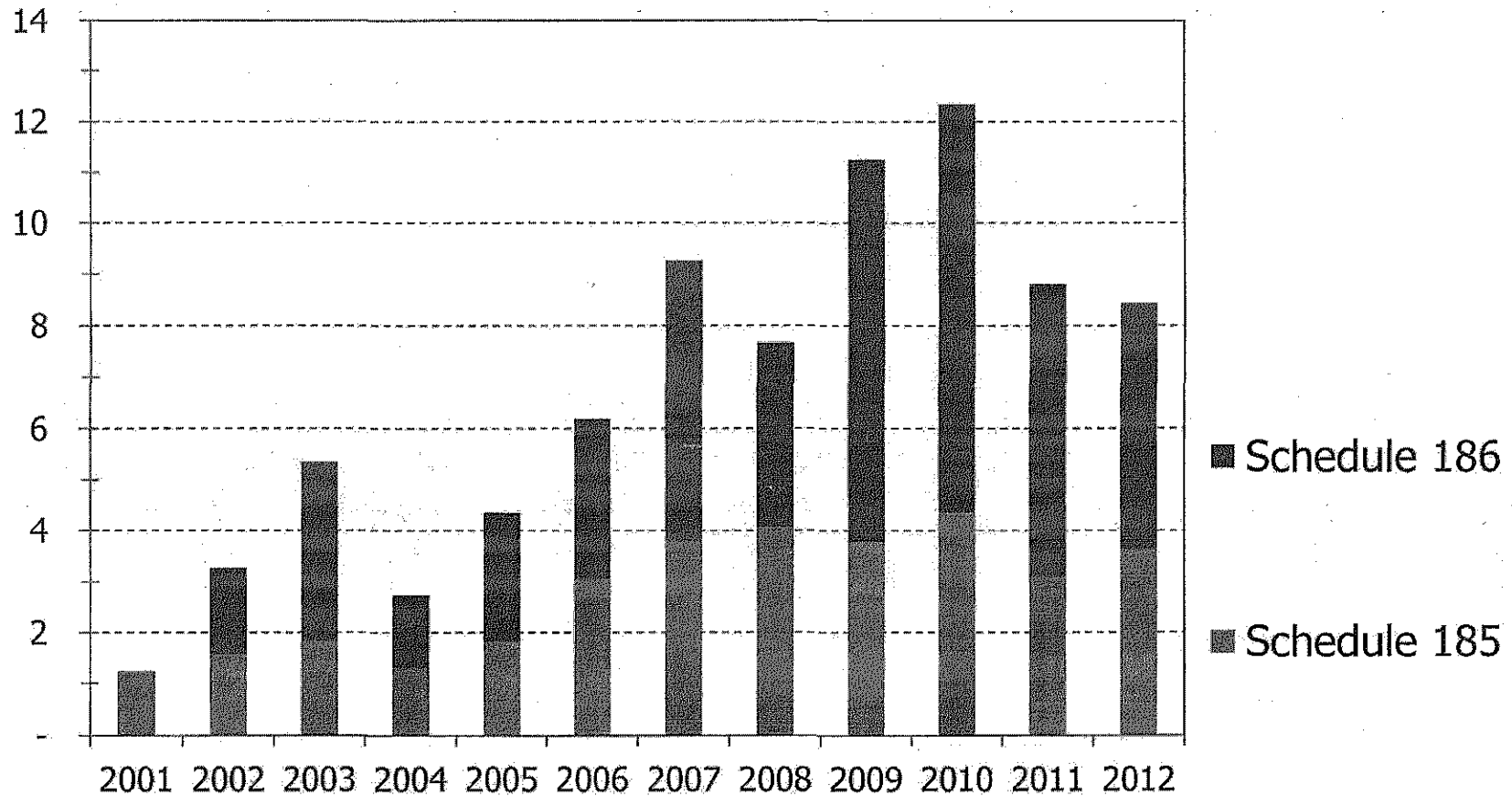


Total Mist Deliverability = 520,000 Dth/day
Currently in Rates = 275,000 or 53%
Not yet Recalled = 245,000 or 47%



History of Credits Paid to Customers

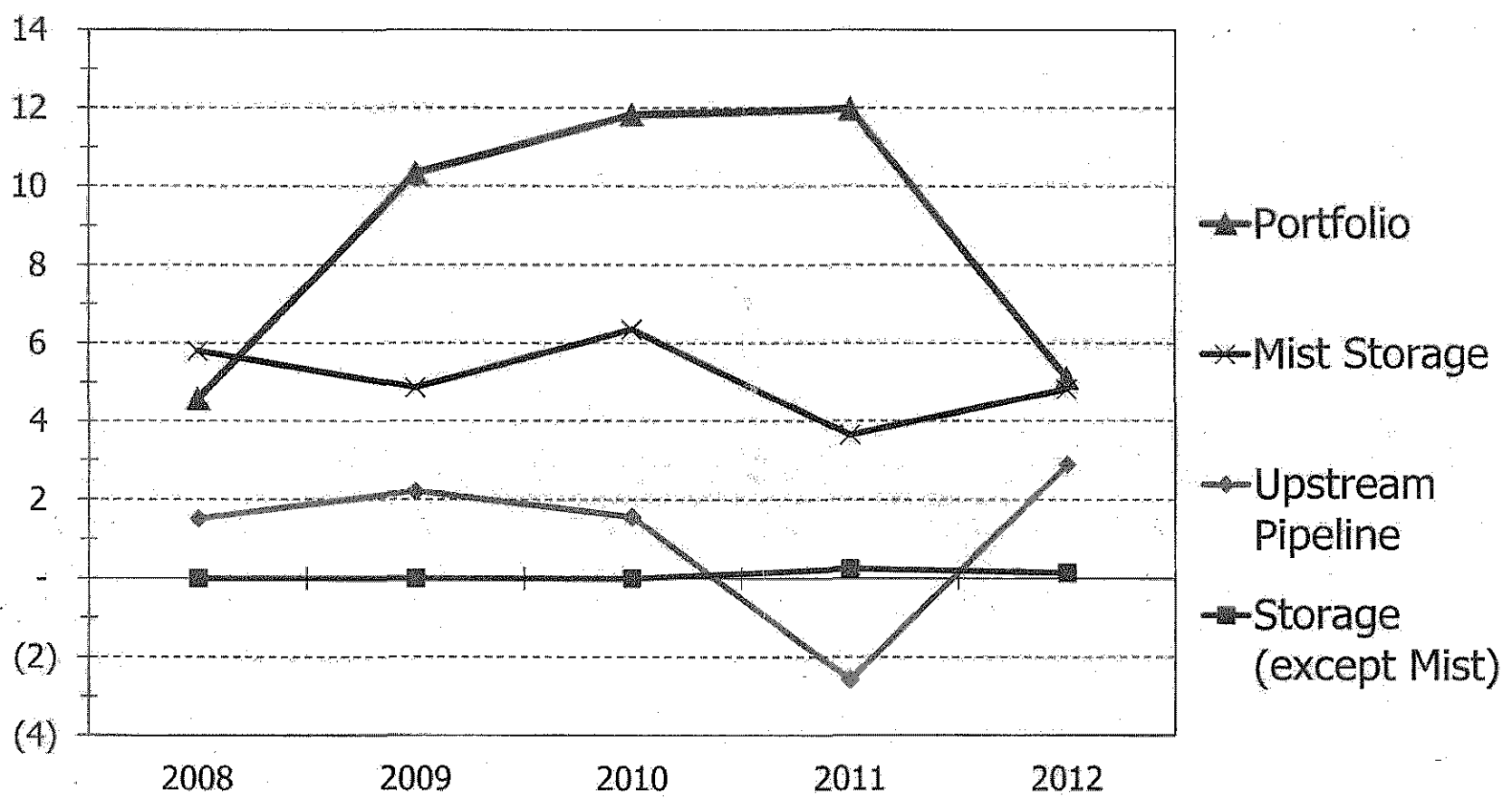
Millions of Dollars per Year





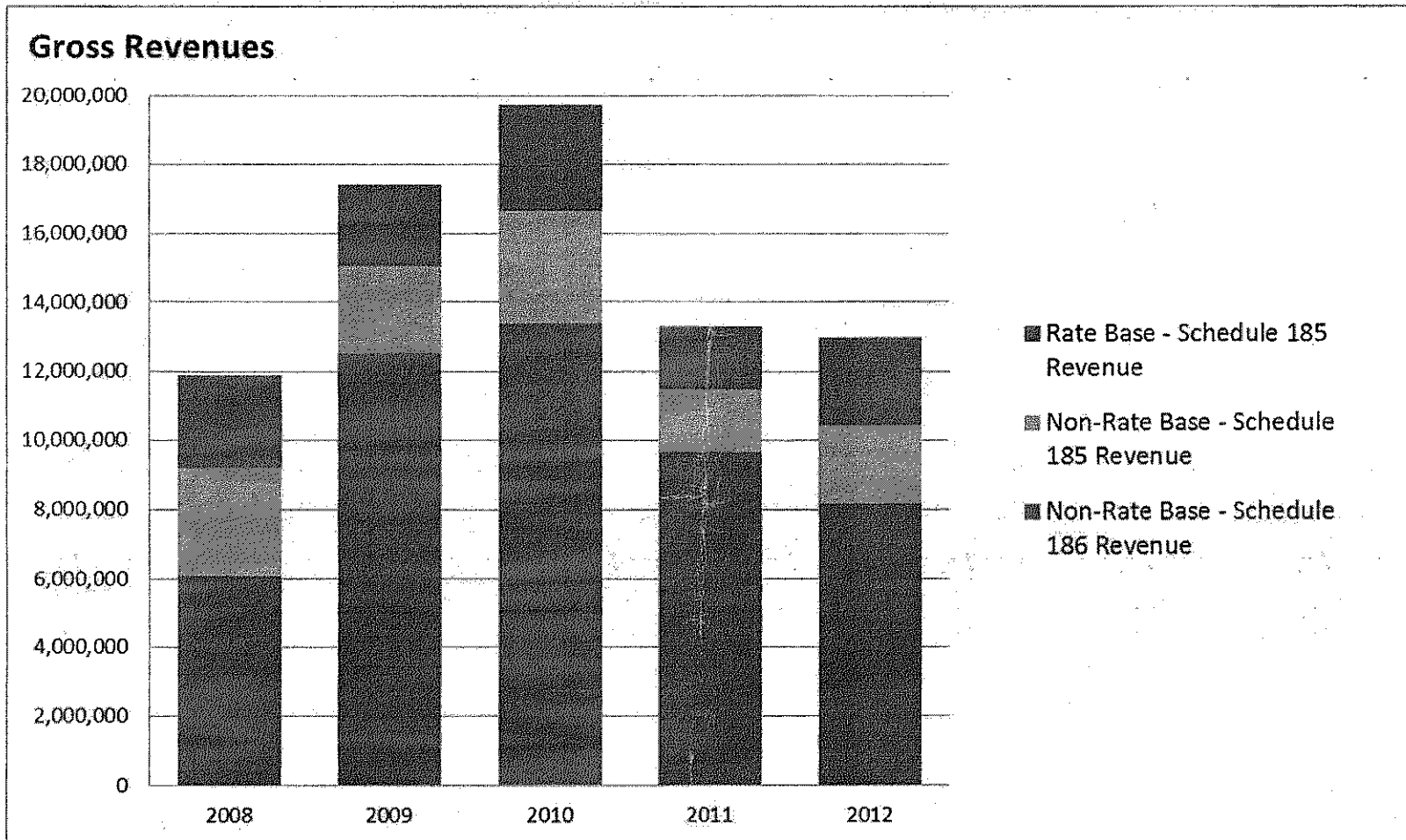
Optimization Revenues – by Activity

Gross Revenues – Millions of Dollars per Year





Optimization Revenues – Another View





Summary and Next Steps

- Discussion of parties' proposals
- Process for docket initiation
- Discuss whether there are alternatives for resolution



Rates & Regulatory Affairs

Investigation of
Interstate Storage and Optimization Sharing
UM 1654

Data Request Response

Request No. UM 1654-CUB-DR 5:

With respect to Mist storage, please provide the following:

- a. What is the total cost of rate base that is allocated to customers?
- b. What is the total investment in interstate storage not yet allocated to customers?
- c. What is the total cost of capital investment associated with common costs? How is this allocated?
- d. What is the total O&M cost associated with Mist and how is it allocated?

Response:

- a. The total investment in Mist and related transmission pipelines that is allocated to rate base for inclusion in customers' rates is \$165.9 million.
- b. The total investment in Mist that is not allocated to rate base for inclusion in customers' rates is \$38.4 million. Please note, this number excludes cushion and working gas amounts.
- c. NW Natural does not use the term common costs to describe any of the costs associated with Mist storage. Costs are assigned directly to NW Natural's gas storage segment in accordance with the Company's Cost Allocation Manual, and in the case of new capital investment in Mist, are allocated to interstate storage unless and until recalled for core customer use.
- d. NW Natural does not track utility O&M costs specific to Mist. Certain O&M costs are charged directly to interstate storage (non-utility). In 2012, this non-utility amount totaled \$3.9 million.



Rates & Regulatory Affairs

Investigation of
Interstate Storage and Optimization Sharing
UM 1654

Data Request Response

Request No. UM 1654-CUB-DR 3:

On lines 23 and 24 of page 4 and continuing on to page 5, Mr. White testifies that by “taking the incremental investment approach, NW Natural was able to leverage sunk costs and avoid construction of unnecessarily duplicative facilities.”

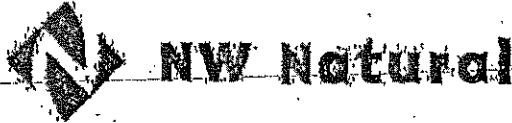
- a. Did the Company quantify the sunk costs that are being leveraged with the new investment?
- b. Did the Company quantify the avoided construction of duplicative facilities?
- c. Has the Company conducted any studies or analyses that identify the assets or personal and common facilities that are being utilized by storage services?

Response:

- a. No, the Company did not attempt to quantify the sunk costs.
- b. No, the Company did not develop a full cost estimate of what standalone duplicative facilities would cost. These would be project specific and dependent on the scale of the project.
- c. No, the Company has not completed such a study; however, if it is helpful, a few comments can be made in response to the question:
 - The primary shared facilities are LDC high pressure transmission lines connecting Mist to Williams Northwest Pipeline and PGE's Beaver site. The need to construct another pipeline from Mist to the interstate system (to either KB Pipeline or Northwest Pipeline directly) was the primary duplicative facility that was avoided by taking an incremental investment approach.
 - Initially, the transmission lines used were the North Mist Feeder and North Coast Feeder to provide for injections and withdrawals of interstate customers at the Northwest Pipeline Deer Island gate.
 - Later, with the expansions in 2005 and 2007, the Company began using the South Mist Pipeline to interconnect with Northwest Pipeline at the Molalla gate.
 - When the Company began providing storage service to PGE at their Beaver and Port Westward generation plants, the Beaver lateral off the North Coast Feeder also began being used for this purpose.
 - A secondary shared facility is the Miller Station (compressor station). The operator building, compression building and in-ground piping infrastructure are utilized. Since interstate storage services began being offered, the Company has added a second turbine compressor and a third dehydration unit. These incremental capital additions are being charged to Interstate Storage (and therefore paid for by shareholders and not customers) except for a small amount of customer capacity recall of the turbine compressor.
 - There are not any reservoir shared facilities within the meaning of how the term is used for embedded versus incremental cost allocation purposes as described

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Page 2

in testimony. All of the reservoir capacity in rates as of 2000 is fully utilized by core customers. The Company developed the Reichhold reservoir in 2001 to be able to begin providing interstate storage services. This reservoir was initially fully paid for by shareholders and charged to Interstate Storage, but as a portion of its capacity has been recalled by core customers, a pro-rata allocation of its capital cost has been allocated to core customer rates with the remaining investment left with Interstate Storage.



Office Correspondence

DATE: October 25, 1999
TO: Bonnie Tatom
FROM: NW Natural Storage Development Team
SUBJECT: Additional Mist Storage Development Questions

Below are the company's responses to questions asked by Staff during our October 7 meeting. When we meet on October 27, we intend to provide you with the further information that is mentioned herein.

1. **Q. Provide more information supporting the basis for the company's request to use a 20% ROE as the point at which the proposed sharing mechanism would begin.**
 - A. **Background.** As you are aware, the company proposes to pursue the expansion of the storage reservoir capacity at Mist in advance of core needs. The company would use such capacity to provide storage services in the interstate market under a FERC authorization pursuant to 18 CFR §284.224 until such time as the capacity is recalled to meet core needs. The proposed incremental expansion would be funded entirely by stockholders and would not be included in utility plant that is part of rate base (until, of course, it is used by the core). We have already discussed how such incremental expansion has numerous advantages and no downside risk exposure for core customers. In order to provide the interstate storage services under the FERC certificate, some existing utility facilities would need to be used, in particular, the North Coast feeder and Miller Station. Recognizing that core customers should be compensated for this use, the company has suggested the use of a 1/3 - 2/3 revenue sharing mechanism. This sharing ratio is consistent with how we have historically handled off-system sales using upstream pipeline capacity. However, since stockholders would be at-risk for the incremental investment and earn a return based solely on the degree of market success, the company has proposed that the 1/3 - 2/3 sharing mechanism would not apply until a certain return on the stockholders' investment has been achieved. Specifically, the company has proposed the use of a 20% unregulated return on equity (ROE) number that would be used as the trigger point at which the sharing mechanism kicks in. The 20% ROE is intended only to be used as a determinant of when revenue sharing would start. It should not be thought of as an assured ROE by any means, nor as a reflection of expectations on what a regulated rate base return should be for such investment.
 - B. **Basis for 20%.** As we indicated in our October 7 meeting, the basis for using the 20% number is somewhat anecdotal. In our discussions with other companies in the

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Page 2

storage business, they have indicated that this is the level of return they look for in order to justify developing independent storage facilities. We have also been using a consultant with considerable expertise in the gas storage field, International Gas Consulting, Inc. (IGC), out of Houston, Texas. IGC has indicated that independent storage developers are now applying to FERC for market-based rates in an effort to achieve sufficient returns to cover the risks inherent in this type of business. Unfortunately, the equity returns associated with market-based storage service are not publicly available. IGC was able to share as one example, that the proposed Avoca storage project in New York, which they were consulted on, was projecting a 20% return on equity. This was the basis for the initial financial presentation to prospective lenders. For purposes of our discussions, in considering the 20% ROE number, we wish to reiterate that such number has only been proposed for use as the trigger point for when sharing would commence. This point was suggested in order to give the company an adequate incentive to develop and market the incremental storage capacity given that stockholders will be bearing all the risk.

- C. **A Two-Tiered Sharing Approach.** During our October 7 meeting, Bill Warren raised a valid concern about the fact that there would be no sharing under our proposal until the 20% ROE point is reached and it is possible that such point would never be reached thus leaving the core uncompensated for the use of some core facilities during the time that the interstate storage services are offered under § 284.224. Bill then suggested a possible two-tier sharing approach where there would be a smaller amount of sharing with the core until a certain point, then a larger sharing percentage would apply. The company concedes that there is a significant possibility that it will be unable to earn at the 20% level because there is uncertainty about what price for storage services the regional market will bear. Under our original proposal, the idea was that if the company is unable to reach the 20% level, then there would be no benefit to retail customers, but also no risk exposure either. However, Bill's suggested two-tier approach where, for example, sharing would be at a 90(shareholder)/10(core) level and once the 20% ROE on the incremental investment trigger point is reached sharing would increase to 1/3(shareholder)/2/3(core) is one option the company is willing to explore. There are also other alternative core compensation structures that could be agreed upon.
- D. **An Alternative Sharing Approach.** The company has developed another option which it recommends for serious consideration. Under this option, there would be an 80/20 sharing (20% to core customers) that would commence at the point the company first breaks even. Breakeven is defined as pre-tax income after incremental O&M, depreciation, interest and property taxes have been deducted. This option would not use an ROE number as a benchmark. There are several advantages to this approach: (1) customers would begin sharing earlier than under the company's original sharing proposal. At the point the company makes \$1, customers would begin to benefit; (2) this approach avoids a potential win/lose situation associated with any fixed cost allocation approach, wherein you could have a situation where customers are benefiting while the company is losing money; and (3) the approach eliminates the need to agree on what the right ROE trigger point

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Page 3

should be. There is only a single tier percentage that is used to govern sharing. The company will provide and discuss additional materials to be provided at our next meeting that display the implications on the customers' portion of the benefit for these different options under various market price assumptions.

2. Q. Provide more information regarding why a cost allocation approach is not desirable.

A. As we indicated in our previous correspondence, there are several reasons why the company proposes that there be no fixed cost allocation for use of Mist to provide interstate storage services. First, the company will request FERC approval to provide the interstate storage services at market-based rates pursuant to 18 C.F.R. §284.224. Consequently, any fixed cost allocation will not be necessary in setting rates. Second, it would be difficult to determine what fixed costs to appropriately assign given their fixed cost nature and the fact that it is more efficient to operate the storage facilities as an integrated whole rather than to attempt to allocate individual reservoirs to core and interstate customers.

B. Nevertheless, to be responsive to Staff's question in this regard, we have prepared a cost allocation analysis -- albeit a very simplistic one. Our intent in doing this was to: (1) calibrate the relative magnitude of dollars involved; (2) understand the implications of this type of approach on sharing; and (3) illustrate the amount of complexity and work that would need to be involved to perform a more complete study each year.

C. Because this analysis is not self-explanatory, the company prefers to distribute this information at our next meeting so that we can walk through the material and respond to questions more interactively. This material will address:

1. Mist storage investment -- existing plant-in-service and projected expenditures.
2. Plant categorization -- reservoirs, Miller Station and pipeline.
3. Allocation bases -- working gas inventory vs. deliverability vs. throughput (injection volume); and
4. Comparison of incremental capital to allocated capital.

3. Q. Can the §284.224 service proposed by NW Natural be provided by an affiliate?

A. No. The FERC authorization assumes that the interstate storage services are provided by the utility itself using temporarily available excess capacity. Specifically, 18 CFR 284.224(a) states, "[t]his section applies to local distribution companies served by interstate pipelines, including persons who are not subject to the jurisdiction of the Commission, by reason of section 1(c) of the Natural Gas Act" [the Hinshaw exemption]. Section (b) goes on to state, "[a]ny local distribution company served by an interstate pipeline or any Hinshaw pipeline may apply for a blanket certificate under this section."



Rates & Regulatory Affairs

Investigation of
Interstate Storage and Optimization Sharing
UM 1654

Data Request Response

Request No. UM 1654-CUB-DR 6:

On lines 21 and 22 of page 5 and continuing to page 6 of his testimony, Mr. Friedman refers to "In the field, the same utility personnel who run the utility storage operations at Mist provide the same support for non-utility Storage Services, for example 24 hours a day, seven day[s] a week monitoring of system status, operation of compressors...and so forth." How does the company allocate the costs of these personnel "in the field"?

Response:

Costs are allocated in accordance with the Company's Cost Allocation Manual. Rather than re-allocate the cost of base operations field personnel already included rates, customers receive a share of the earnings from Interstate Storage. Any incremental costs attributable to the additional facilities and capacity needed to provide Interstate Storage Services are directly charged to that non-utility business segment. There is currently 1 incremental FTE storage operations position that is charged to Interstate Storage. See also the Company's response to CUB DR 8b.



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Investigation of
Interstate Storage and Optimization Sharing
UM 1654

Data Request Response

Request No. UM 1654-CUB-DR 7:

In lines 4-8 of page 6, Mr. Friedman describes the role of utility personnel within the office and states that the "incremental cost associated with work performed by utility personnel for Mist Storage Services is allocated to the Gas Storage business segment." Are all "non-incremental costs" assigned to the utility? Please explain how non-incremental costs are allocated.

Response:

Yes, consistent with the Company's Cost Allocation Manual, all "non-incremental costs" are assigned to the utility. If they are "non-incremental" costs, then they already are borne 100% by the utility and are not attributable to the activities of the Gas Storage business segment. Customers receive a share of the earnings from Interstate Storage that effectively reduces the non-incremental costs they are incurring.



Rates & Regulatory Affairs

Investigation of
Interstate Storage and Optimization Sharing
UM 1654

Data Request Response

Request No. UM 1654-CUB-DR 4:

According to the workshop handout from May 8, 2013, the third-party optimization of gas at Mist is based on the total deliverability of gas stored there (53% of the gas belongs to ratepayers, so 53% of the revenues associated with optimization are shared with customers on a 67-33 basis; 47% of the gas belongs to storage customers and is shared on a 20-80 basis). With respect to this, please provide the following:

- a. In what docket/public meeting did the Commission approve this allocation based on deliverability?
- b. Regarding the terms of the contracts that NW Natural has related to provision of storage, please explain how NW Natural is allowed to use someone else's gas for optimization purposes?
- c. It is CUB's memory that during the May 8, 2013 workshop, NW Natural explained an optimization activity it called "backdraft". Please explain in writing how this "backdraft" activity is permissible using someone else's gas?
- d. Is NW Natural authorized to use the "physical volumes" of gas that are owned by storage customers (not the utility and its customers) to "backstop" its optimization activities if such activities fall "short" as described on page 12 of Mr. Friedman's testimony (NWN/200)? If yes, please provide copies of the documentation that demonstrates this authorization.
- e. Please list all parties that store gas at Mist.
- f. Please provide copies of all contracts that NW Natural has with those entities.

Response:

a. See Staff Memorandum recommending approval of the June 2013 customer credits filed under NWN OPUC Advice 13-5. CUB DR 4 Attachment-13 CONFIDENTIAL is page 9 of the Interstate Storage and Transportation Services Report to the OPUC which shows the allocations used to derive the June 2013 credits. This allocation methodology was established in the Company's 2002 filing where the Commission approved the initial customer credits relating to this activity. The methodology has been used since that time although the specific percentages applied have been updated in those years where the relative proportions of deliverability capacity between core customers and Interstate Storage have changed due to Mist capacity recall.

b. NW Natural does not use the gas belonging to Interstate/Intrastate Storage customers for optimization purposes. NW Natural does use all the deliverability developed at Mist for optimization purposes, i.e., compression and related facilities. That is why the optimization

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NWN's Response to CUB DR 4
Page 2

attributable to Mist storage is allocated between Core Utility and Interstate/Intrastate Storage based on deliverability.

c. As mentioned above, NW Natural does not perform "backdrafts" or other transactions at Mist using gas belonging to Interstate/Intrastate Storage customers.

d. As mentioned above, NW Natural does not use physical gas volumes belonging to Interstate/Intrastate Storage customers to "backstop" its optimization activities.

e. Attached as CUB DR 4 Attachment-1 is the latest FERC Form 549D filed by NW Natural for the 1st Quarter of 2013. It lists the companies storing gas at Mist under firm or interruptible service agreements as: Portland General Electric Company, IGI Resources Inc., FortisBC Energy Inc. (FKA Terasen Gas Inc.), Iberdrola Energy Services LLC, Idaho Power Company, Total Gas & Power North America Inc., and Shell Energy North America (US) LP. Note that the contracts with Iberdrola Energy Services LLC, Idaho Power, and Total Gas & Power North American, Inc. expired on April 30, 2013, and these entities are not currently active interstate customers.

f. See Attachments CUB DR 4 Attachment-2 through 12 all confidential.

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 25, 2000

REGULAR AGENDA X CONSENT AGENDA EFFECTIVE DATE April 26, 2000

DATE: April 19, 2000

TO: Bill Warren through Lee Sparling

FROM: Bonnie Tatom

SUBJECT: NW Natural's Request for a Revenue Sharing Mechanism with Core Customers in Providing Interstate Storage and Transportation Services under FERC Regulations 18 C.F.R. Section §284.224 (Schedule 185)

SUMMARY RECOMMENDATION:

Staff recommends that the Commission approve NW Natural's proposed Schedule 185 which describes its 80/20 revenue sharing mechanism regarding Mist §284.224 services.

DISCUSSION:

History & Procedural Background

NW Natural's (NWN's or the company's) storage operations at Mist commenced in 1989 when two depleted gas reservoirs were converted to provide storage service. Including the most recent expansion, Mist's current configuration consists of three separate reservoirs – Bruer, Flora and Al's Pool – with a combined working capacity of 8.5 Bcf and a combined deliverability of 190 MMcf/d (1.9 million therms/day). These facilities are connected to Miller Station - a central compression and control station. The company plans to continue to expand Mist as a least-cost resource to meet the growing needs of its core customers, consistent with its current integrated resource plan, which will be reviewed by Staff and the Office of Energy throughout this spring.

The maximum build-out potential of Mist is 425 MMcf/d. This limitation is based on operational restrictions at Miller Station. NW Natural proposes to further expand Mist's current working gas capacity by 3.0 Bcf and the deliverability by 235 MMcf/d (to 425 MMcf/d) in incremental stages and offer any excess capacity in interstate commerce. Such a build out appears to be cost-effective and will prevent further water incursion and related reservoir degradation. This will eventually accrue to the advantage of core customers when the capacity is recalled to meet core market requirements.

Staff and NWN discussed the company's interstate services and proposed sharing mechanism options in meetings held August 12, September 1 (see Attachment 1), and October 27, 1999. NW Natural

responded to Staff's questions during these meetings as well as in two memoranda, dated September 28 and October 25 (see Attachments 2 and 3, respectively). In addition, during a meeting held on November 2, 1999, the company presented Staff with a simplified cost allocation analysis (see Attachment 4) to demonstrate the difficulties associated with such an approach as well as a detailed analysis of several alternative revenue sharing options.

At these meetings, NW Natural discussed its desire to begin offering storage services into the interstate market using storage capacity that is temporarily excess to the company's core customer needs. Without impacting its Hinshaw¹ exemption, NWN would be able to provide such services pursuant to a Limited Jurisdiction Blanket Certificate from FERC under 18 C.F.R. §284.224. The company's proposal to provide such service would involve the expansion of storage reservoir capacity at Mist at shareholder expense and in advance of its core customers' needs. However, because some use of existing utility facilities (such as the North Coast Feeder and Miller Station) would be required, NW Natural has proposed a sharing mechanism to compensate the core customers for such use. Any incremental expansion costs associated with this service would be borne by the company's shareholders and such costs would not be included in utility rates until such time as the capacity is recalled for the core's use, and ratemaking treatment is approved by the Commission.

On March 24, 2000, NWN filed a new schedule, Schedule 185, "Special Temporary Adjustment; Interstate Storage and Transportation Credit," and other revised schedules to initiate a revenue sharing mechanism between NW Natural and core customers taking service under Schedules 1, 2, 3 and 4 of P.U.C. Or. 22 and Schedule 1 of P.U.C. Or. 23.

After discussion with Staff, the company withdrew the filing in its entirety and on April 18, 2000, re-submitted the filing under Advice No. OPUC 00-4A. This filing, accompanied by an application to waive statutory notice (L.S.N.), revised the mechanism to provide an annual credit to core customers on or after April 1, beginning in 2001, rather than to credit customers through the company's PGA filing. The mechanism is detailed in Schedule 185, now titled "Special Annual Interstate Storage and Transportation Credit."

*Interstate Storage Services under FERC §284.224 --
NW Natural's Proposal*

Section §284.224 (see Attachment 5) of FERC's regulations allow a local distribution company or any Hinshaw exempt pipeline to provide FERC jurisdictional storage and transportation services to customers in interstate commerce using excess capacity without losing its exemption upon the filing of an application for and receiving a blanket certificate from FERC.

¹ NW Natural has a Hinshaw exemption from FERC jurisdiction under Section 1(c) of the NGA which provides for such an exemption if: (1) all gas moved by a company is received from others within or at the boundary of a state; (2) all such gas is ultimately consumed within the state where it is received; and (3) the rates, services and facilities of the company are subject to regulation by a state commission.

In its filing, NW Natural proposes that any incremental capital investment or O&M above core customer needs which is used in providing interstate storage services be fully borne by shareholders. Core customers would not be exposed to any additional costs at this time. Any capacity made available to the interstate market in the near term would eventually be recallable by core customers. The company also proposes that at the time of such recall, the related investment be shifted into retail rates at original cost less depreciation, subject to Commission review and approval.

Service under FERC §284.224 would be a bundled storage and transportation service – from Mist over the company's intrastate distribution lines to a NW Natural/Northwest Pipeline gate station. The company would use existing excess capacity on its North Mist Feeder and North Coast Feeder in providing this service. Storage service used for retail core customers would continue to take precedence over interstate service, hence reliability, according to NW Natural, would not be affected. NW Natural believes that sufficient capacity exists in the North Coast Feeder so that the 284.224 interstate service should not impact current on-system interruptible transportation customers.

Revenue Sharing Options

NW Natural already has a revenue sharing mechanism in place for off-system commodity sales that is split 33/67, with the 67% share going to core customers. Here, the assets used to support such off-system sales are fully included in retail rates. This mechanism provides an incentive for the company to optimize the market value of the resources NW Natural has acquired to support core customer loads.

With interstate storage service under §284.224, NW Natural has proposed a different revenue sharing mechanism because initially the incremental capital investment required to make this service available will be borne by its shareholders. The company also believes that there is considerably more risk to the shareholders involved for this type of investment. The primary risk is the market-driven price the company would be able to achieve in the competitive interstate market. The prospective return from the company's proposed investment in an interstate storage offering is thus highly sensitive to the assumption regarding price.

NW Natural's Original Proposal

NW Natural's first sharing proposal, presented at the August 12 and September 1, 1999 meetings, was that it be allowed to retain all revenues until the company achieved a 20% return on its investment, at which time the typical 33/67 sharing mechanism would apply. Core customers would have no downside cost exposure and would have the opportunity to share in a portion of the income once the project was fully successful.

Staff had two primary concerns about this proposal. First, according to NWN's sensitivity analysis, a return of 20% or more would only be reached under very optimistic price assumptions. There also appeared to be a significant possibility that the company could be successful in earning a return without

reaching the 20% threshold. While conceding that core customers would not be exposed to any risks or additional costs, it was Staff's position that core customers should be compensated in a reasonable manner for use of facilities included in rates. Staff requested the company develop an alternative mechanism that would allocate costs between core and interstate market customers, compensating core customers fairly for the use of facilities included in core customers' rates. Staff's second concern regarded the basis for using 20% as the appropriate return.

Subsequent Proposals

In response to Staff's concerns, NW Natural developed two alternative revenue sharing methodologies: (1) an 80/20 sharing after a breakeven point is reached; and (2) a 90/10 sharing until the return reaches 20%, with a 33/67 sharing after that. In addition, the company provided an analysis showing the effect of using a simplified cost allocation methodology rather than a revenue sharing mechanism. These options are discussed below.

Under the 80/20 methodology, the company would retain all revenues until it reached a breakeven point on an incremental cost basis. At such point, the company's shareholders have earned a zero return. Beyond this point, customers would begin to share in 20% of the net revenue, i.e., net margin before income taxes. Incremental costs include both O&M and capital carrying costs, such as depreciation, property taxes and interest. NW Natural proposed using an imputed capital structure of 50% debt and 50% equity, with the cost of debt defined as the average long-term cost of debt authorized in UG 132.

The 80/20 methodology has several advantages. From NW Natural's perspective, it is a "win-win" approach. Core customers would begin sharing at the point when shareholders begin earning a positive return. In addition, because of the risk and uncertainty associated with the revenue stream, the company prefers a sharing approach rather than attempting to negotiate some guaranteed fixed payment amount. From Staff's perspective, core customers are more likely to receive a positive amount under the 80/20 methodology relative to the other options considered. According to NW Natural's sensitivity analysis, this option would provide the largest benefit to core customers under low and medium market price assumptions (low is defined as \$1.00/Mcf and medium is defined as \$1.50/Mcf). This is the preferred approach of both Staff and NW Natural.

The other alternative – 90/10 until a 20% return is achieved then 33/67 – yields similar results and suffers from the same disadvantages as the company's initial proposal. This option is not attractive to either the company or Staff.

In response to Staff's inquiry, NW Natural also provided analysis showing the implications of using a simplified cost allocation methodology. This approach was also not favored by NW Natural or Staff for several reasons. First, it would create considerable administrative work each year in order to reflect annual capacity and investment changes, and also for Staff to audit the company's accounting records of these changes. Second, it could potentially yield a "win-lose" outcome under certain low-price scenarios, wherein the company shareholders would be losing money while retail customers gained, an

outcome that neither the company or Staff felt was equitable. Finally, and most importantly, among the numerous disadvantages associated with this approach is the fact that the company would not be interested in pursuing FERC authority to offer the \$284.224 service under this approach.

Core Customer Benefits

Does the company's proposal reasonably compensate core customers for costs incurred for the use of utility facilities for nonregulated services? Yes. Under NWN's proposal, core customers bear little risk. Core customers will benefit in at least four ways from NW Natural's plans to develop additional capacity at Mist and market such excess into the interstate market:

1. At the time the storage asset is added to rate base, it is at the depreciated cost, subject to Commission review and approval. Therefore, core customers are charged less for the asset than they otherwise would be.
2. In support of this particular approach (the 80/20 split after the breakeven point), customers receive a larger credit by the end of five years than under the simplified cost allocation approach under all modeled prices except for \$0.50/Mcf. Under high prices (greater than or equal to \$2.00/Mcf in the company's comparison of the sharing options), the company's earlier approach of 90/10 after meeting a 20% return threshold is a better outcome for customers. However, this approach suffers from the same disadvantages as the company's initial proposal. (See Attachment 6 for a comparison of the various outcomes.)
3. Core customers get the benefit of greater future storage resource certainty. The reservoirs at Mist that have been produced out, but are not yet used for storage, suffer from water encroachment, which reduces such reservoirs' available working gas inventory capability. Earlier storage development of such reservoirs will help mitigate degradation of these reservoirs' potential capacity.
4. If there is no net margin for a year, core customers do not have a negative credit, but instead have a zero adjustment to rates; NW Natural's shareholders would realize no gain or take a loss. Even though the core customers do not directly benefit by way of the credit if there is no net margin to share, these customers still benefit because of the other benefits discussed above. If the net margin is positive, core customers are credited 20% of the net margin before income taxes.

Review by Staff and Other Stakeholders

As indicated in the beginning of this public meeting memo, Staff has had a number of meetings with the company to discuss this proposal. In addition to the meetings with NWN, Staff has met internally to refine the proposal and develop a better understanding of the proposal's benefits to core customers. We are satisfied that the company's proposal to pre-build future Mist expansions makes sense and that the 80/20 revenue sharing mechanism does not harm core customers. In fact, according to a recent GRI report, it has become increasingly evident across the nation that storage operators are expected to

“maximize the value of storage and are likely to offer new services that use existing facilities more effectively.” Storage operators “who fail to respond to the changing market by offering more flexibility may eventually find themselves at a competitive disadvantage in the future and may see the value of their storage assets stagnate.” NW Natural’s decision to pursue the Limited Jurisdiction Blanket Certificate under 18 C.F.R. §284.224 appears consistent with the GRI report.

Staff distributed a draft of the public meeting memo to Staff’s counsel, Northwest Industrial Gas Users (NWIGU), and the Citizens Utility Board (CUB).

Assistant Attorney General Paul Graham has indicated that the Commission can rule on this tariff filing outside a general rate case. Staff concurs. The Commission would not be making any decision about ratemaking treatment of any assets until such time as they are actually included in a future rate case. What the company is proposing now, with Staff’s support, is that the assets would be transferred into rate base sometime in the future at depreciated cost.

CUB discussed the proposal with NW Natural and Staff. CUB was concerned that the core customers might not be insulated from risk after the asset was moved into rate base. Staff believes that it is premature to be concerned about the “risk” associated with having the asset in rate base. Storage has been the clear choice in NW Natural’s portfolio throughout most of the 1990’s and appears at this time to be the least-cost choice into the next 20 years. It would be more expensive, and therefore more risky, to core customers to not pre-build Mist in advance of core customers’ needs. CUB does not oppose the company’s filing.

NWIGU met with Staff to discuss its views on NWN’s proposal. NWIGU also plans to meet with the company at a later date. NWIGU wants to further expand its understanding of how the provision of the interstate market services may affect the operation of the facilities at Deer Island, the North Coast Feeder and the North Mist Feeder. NWIGU also does not oppose the filing, but is legitimately concerned that its members are not adversely affected by the use of these facilities for nonregulated services.

STAFF RECOMMENDATION:

Staff recommends that the Commission approve the Schedule 185 mechanism for NW Natural’s §284.224 services for sharing net revenues between the company and its core customers above its breakeven point at an 80/20 percent split. In addition, Staff recommends that the company submit the following filings regarding this mechanism:

1. NW Natural must file, by March 31 of each year beginning in 2001, a pro forma financial statement indicating its net income (before tax) under the incremental cost methodology described above and the company’s core customers’ share of this income. This

- “interstate storage and transportation credit” shall be applied to customer’s bills, or placed in an interest bearing deferred account, on April 1 of each year, commencing April 1, 2001, or at a date other than April 1 for reasons and on terms as the Commission may approve.
2. NW Natural must prepare for Staff, by August 31 of each year beginning in 2001, an informal update to its IRP. This update shall include an updated load forecast and identify any need for additional Mist capacity by its core customers for subsequent heating seasons, consistent with the methodology used in its most recent Commission-acknowledged IRP.
 3. NW Natural must file, by March 31 of each year beginning in 2001, its plan to develop any incremental capacity for the interstate market in that year and identify its estimated incremental capital costs.
 4. NW Natural must file, quarterly beginning with the quarter ending December 31, 2000, an update of its regional storage and transportation market activity. This update may be submitted under protective cover, and must include a summary of market prices, volumes and delivery points for which the company provided the regional market services.
 5. NW Natural must maintain adequate and accurate records of its storage and transportation market activity specifically relating to daily nominations, confirmations and throughput volumes at the company’s Deer Island or any other interconnection with Northwest Pipeline Corporation for Commission review upon request

Staff recommends that the Commission approve the company’s L.S.N. and allow the following tariff sheets to go into effect on April 26, 2000:

P.U.C. Or. 22

Thirteenth Revision of Sheet v
Seventeenth Revision of Sheet vi
Sixteen Revision of Sheet 1-1
Eighteenth Revision of Sheet 2-1
Seventeenth Revision of Sheet 3-1
Sixteenth Revision of Sheet 4-1
Substitute Original Sheet 185-1

P.U.C. Or. 23

Eighth Revision of Sheet iv
Seventeenth Revision of Sheet 1-1
Substitute Original Sheet 1D-1